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FRAMEWORK
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IMPROVEMENT:
BENCHMARK TUTORIAL

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FRAMEWORK FOR MANAGING PROCESS IMPROVEMENT: BENCHMARK TUTORIAL

How to Prepare for and Conduct a Benchmark Project

July 15, 1994

Prepared for the:

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Director, Functional Process Improvement

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INTRODUCTION TO BENCHMARKING

Benchmarking is the search for industry best practices that lead to superior performances. While benchmark teams can expect to uncover best practices that you may not have considered prior to the benchmark program, most likely you will not encounter a company that has exactly the same organization layout, processes or goals. Therefore, entering the benchmark phase of a process improvement program is not a step to be taken lightly.

Once an organization determines that it will invest in a benchmarking program, it should be understood throughout all levels of management that benchmarking is an on-going process that will require constant updating over time. The time and monetary commitment to a benchmark program that will yield exceptional results is significant. More important, if the program is conducted appropriately, the professional contacts made can provide a source for openly sharing information for years to come.

Setting out to benchmark a process requires the organization to carefully scrutinize its own process(es) prior to talking to any other company. Often, once an organization has committed to benchmark a process, the eager team immediately wants to get on an airplane and benchmark another company. This is called "professional visiting." It is a frequent occurrence and a nuisance to serious benchmarkers. The team will have a nice visit, but they most likely will not be asked back, no long-term contacts will be established and it is unlikely that any serious information exchange will have taken place.

Serious benchmarkers spend a significant amount of time up-front, before the first telephone call is made to a prospective partner. Objectives are set, processes are analyzed and research is completed. This tutorial will take you through the five steps necessary to prepare for and conduct a benchmark program that will produce solid results you can immediately use in your process improvement program.

Success Indicators for Benchmarking

In his book, *Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance*, Robert Camp listed success indicators for benchmarking. These have been adapted for this tutorial and are listed below.

- An active commitment to benchmarking from management

- Clearly defined and articulated objectives exist for the benchmark project

- A clear and comprehensive understanding of how one's own work is conducted as a basis for comparison to industry best practices

- A willingness to change and adapt based on benchmark findings

- A realization that competition is constantly changing and there is a need to "shoot ahead of the duck"

- A willingness to share information with benchmark partners

- A focus on benchmarking first on industry best practices and second on performance metrics

- The concentration of leading companies in the industry or other functionally best operations that are recognized leaders

- Adherence to the benchmarking process

- An openness to new ideas and creativity and innovativeness in their application to existing processes

- Conclusions can be justified by data gained during the project

- A continuous benchmarking effort

- The institutionalization of benchmarking[1]

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1   *Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance*, Robert C. Camp, ASQC Quality Press, 1989.

THE BENCHMARKING PROCESS

The following table lists the benchmarking steps and the percentage of the total time that should be allowed for each step. Note that a significant portion of the time spent on the process occurs during the initial steps in this process.

Time Allotment	BENCHMARKING STEPS
25%	1. *Lay a Strong Foundation for Benchmarking Success* Select the process(es) to benchmark. Then analyze the process, calculate metrics and define performance gaps.
25%	2. *Select Benchmark Partners with Best-in-Class Processes* Create the benchmark team. Then, based on the process(es) selected, conduct research to determine the benchmark partners. Contact the potential partners, narrow the lists, develop briefing packages and questionnaires, and set benchmark meeting dates and times with the final partners.
20%	3. *Plan for Productive Benchmark Sessions* Develop agendas, train the benchmark teams on their responsibilities, complete travel plans and logistics.
15%	4. *Conduct a Thorough Benchmark* Gather data on best-in-class companies through site visits, telephone interviews and questionnaires. Define the practices in use in both your organization and that of your partner and compare and contrast them. Debrief after each benchmark meeting to ensure all information was received and recorded accurately.
15%	5. *Analyze the Benchmark Results and Plan to Create a Best-in-Class Process* Quantify the differences in practices and metrics between your organization and your partners' organizations. Then determine which of your partners' practices will help you reach your goals of improving your benchmarking process. Finally, determine how best to achieve the desired improvement in your benchmarking process and create a plan that can be used to implement it.
Ongoing	*Implement Your Improved Process and Monitor the Results* Put your plan into action to improve your benchmarking process. Measure the improvement and identify the causes, if any, for the differences between the expected level of improvement and the level attained. Continue to monitor the results and complete on-going benchmarking studies at regular intervals in the future.

Benchmarking Timeframe

A benchmarking program is a significant phase of a process improvement program. The benchmark team should plan to spend no less than four months, and more likely up to six months to complete the entire program. This is not to say that the entire team will be working only on benchmarking full time during that period.

Rather, there will be a significant time commitment in the first nine to ten weeks when the processes are being selected and analyzed. This is often undertaken as a part of a larger process improvement program as well.

Once the team feels comfortable that they understand their own processes, the research begins on prospective partners. This too is a phase that requires a high level of commitment. Next, the team begins to contact the potential partners and set dates for meetings. Fewer individuals are required for this portion of the project. Professional courtesy indicates giving a partner a two to six week lead time.

During the partner selection task, the benchmark team's time commitment can lessen. However, once the meetings begin, the team will once again be committed to attend meetings, debrief the meetings, and then compile the final report.

Again, many organizations view benchmarking as a check mark on a list of steps in a project. They are interested only in checking off the box as quickly as possible. In these situations, the suitor organization (the organization conducting the benchmark program) will likely gain little since a shortened lead time and insufficient preparation may deprive them of successful meetings with the best potential partners.

To help plan your time, the following time line shows the time commitments assuming a four month benchmark project on a single process, with a goal of benchmarking five to six organizations.

Typical Benchmark Timeframe

		Month 1	Month 2	Month 3	Month 4	Month 5
25%	Step 1	▬▬▬▬ (6 weeks)				
25%	Step 2		▬▬▬ (6 weeks)			
20%	Step 3			▬▬ (4 weeks)		
15%	Step 4				▬▬ (3 weeks)	
15%	Step 5					▬▬ (3 weeks)
	Ongoing					▬▬▬

Step 1:   Lay a Strong Foundation for Benchmarking Success
Step 2:   Select Benchmark Partners with Best-in-Class Processes
Step 3:   Plan for Productive Benchmark Sessions
Step 4:   Conduct a Thorough Benchmark
Step 5:   Analyze the Benchmark Results and Plan to Create a Best-in-Class Process
On-Going: Implement Your Improved Process and Monitor the Results
           (Note that this phase is on-going. It begins at the end of step 5, but will continue for some time into the future.)

Another way to look at the time frame follows:

Weeks 1 - 6 (Step 1):
- AS-IS models
- Start benchmarking

Weeks 3 - 9 (Step 2):
- Research for benchmarking (data collection, analysis)

Weeks 7 - 11 (Step 3):
- Plan benchmarking, approach and confirm partners

Weeks 11 - 14 (Step 4):
- Conduct benchmarks

Weeks 13 - 16 (Step 5):
- Analyze benchmark program and create final report

Weeks 17 - ? (On-going Project):
- Create TO-BE models and continue with reengineering program

Remember that your time frame will vary, depending on the size of your benchmark team, the level of support staff available to you, number of processes you plan to benchmark, the number of partners you plan to benchmark, and the availability of those partners. When creating your overall plan for the benchmark project, give yourself plenty of time up-front for planning and setting dates. As you can see by the chart above, Steps 4 and 5 go relatively quickly once the initial work is complete.

STEP 1. LAY A STRONG FOUNDATION FOR BENCHMARKING SUCCESS

Select the process(es) to benchmark and then analyze the process, calculate metrics and define performance gaps.

This step should be started well before you plan to conduct a benchmark meeting with a potential partner. Referring back to page 5, you will see that step 1 begins three full months before the first benchmark meeting in step 4. Depending upon your variables, do not plan to conduct your first benchmark meeting for ninety days (three months) from the onset of this step.

The tasks in this step are completed by the process improvement teams within the scope of an authorized process improvement project.

1.1 Identify Critical Success Factors

"Critical success factors are the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization. They are the few key areas where 'things must go right' for the business to flourish. If results are not adequate, the organization's efforts for the period will be less than desired."

> - John F. Rockart, "Chief Executives
> Define Their Own Data Needs,"
> *Harvard Business Review*
> (March-April 1979)

Critical success factors (CSFs) may include productivity, technology, customer relations, overhead cost structures and facilities. When working on a benchmarking project, CSFs should imply the process performance measures that indicate the quantitative level of performance for a key business process. For example, for research and development, the CSF would be time-to-market for a new product.

Critical success factors should be linked to the key business processes in every organization. CSFs should be quantifiable, measurable and auditable indicators of process performance. They are selected as measures of business effectiveness (quality), efficiency (cycle time) or economy (cost). CSFs are used for the measure of comparison in a benchmark study.

When you have identified your CSFs and begin to track them, you are better able to quickly recognize areas that need additional attention in the reengineering program. If the benchmarking project is a part of a larger process improvement program, the CSFs may have already been developed for the organization's key processes.

The Critical Success Factor Worksheet on the following page should be completed for each CSF you are considering for your benchmark study. The completed worksheets will help you evaluate potential CSFs to determine their effectiveness as benchmarks.

All of the forms shown in this booklet are repeated in Appendix A for your use and duplication.

Critical Success Factor Worksheet

Key Business Process:	
Proposed Critical Success Factor:	
Reason Proposed:	
CSF Process Owner:	

Analysis for CSF Qualification	
1	Is the proposed CSF quantifiable? How?
2.	Is the proposed CSF measurable? How?
3.	Is the proposed CSF auditable? How?
4.	Does the proposed CSF indicate process results over time? How?
5.	Does the proposed CSF indicate progress toward goals over time? How?
6.	How does a change in the key business process correlate with changes in the magnitude of the proposed CSF?
7.	Is this measure for a proposed CSF accepted within your organization?
8.	Is this proposed CSF measure widely accepted by other organizations? Which ones?
9.	Is it easy to obtain data? Is the data integrity reliable? Is the resulting CSF measure easily calculated?
10.	Is this proposed CSF reported in open literature? Where?

FIGURE 1. Critical Success Factors Worksheet

1.2 Begin Developing the Process Notebook

Now begin to document the process to be benchmarked. The following questions should be asked, answered and documented in the notebook by the process owner.

1. What is our process?

2. How does our process work (step-by-step)? (The process should be mapped out on a board where it can remain throughout the duration of the project.)

3. How do we measure it?

4. How well is our process performing today?

5. Who are our customers?

6. What products and services do we deliver to our customers?

7. What do our customers expect or require of our products and services?

8. What are our performance goals?

9. How did we establish these goals?

10. In what ways are we achieving our performance goals?

11. In what ways are we not achieving our performance goals?

12. How does our product and service performance compare with that of our competitors?[2]

You may want to use the Process Performance Profile (or some rendition of it that fits your needs) on the following page to help you in this task.

---

1   *The Benchmarking Workbook*, Gregory H. Watson, Productivity Press, 1992.

Process Performance Profile

| Process Output: | |
| Process Customer: | |

Process Performance Measures	Current Level	Trend
Quality: First-pass yield, Customer returns, Process completion/plan ratio		
Cost: Process cost, Process value-added, Value-to-cost ratio		
Cycle Time: Work-in process inventory, Process cycle time, Process changeover time, Process downtime		

Process Performance Goals	Short Term	Long Term
First pass yield, Value-to-cost ratio, Cycle time		

Process Activity Diagram:

FIGURE 2. Process Performance Profile

1.3 Identify and Document Performance Gaps in Product Quality

Process attributes related to developing high-quality products and services should be the focus of all process improvement efforts. Therefore, identifying and quantifying performance gaps in quality-related areas are critical. Failures in quality may be felt externally, which means that customers are not being satisfied (among other things), and/or they may be felt internal to the process, which invariably means that process costs are excessive. There is substantial proof that while quality costs, poor quality costs more.

Performance gap analysis should include investigating the following factors with respect to output products and services. Once again, excessive performance gaps may indicate the need to consider radical process reengineering, especially if benchmarking results show that other organizations are doing much better.

- Unacceptable products and services
  — Returns
  — Rejects
  — Loss of customers
- Too much time spent redoing work
- Customer complaints
  — Phone calls
  — Letters to higher authority
  — Adverse public comments or publicity
- High warranty costs or service call-backs
- Excessive meeting time devoted to problem/issue resolution
- Low morale or high personnel turnover.

1.4 Identify and Document Performance Gaps in Process Cycle Time

Experience has shown that reducing process time factors will always result in reducing process costs. Therefore, it is also critically important to perform a thorough gap analysis in this performance area. Process time is the aggregate of operations time, delay time, overhead time, and quality-related time.

The measures to study include the following:

- Cycle time per unit of output or per transaction
- Wait time per unit of output or per transaction
- The ratio of direct labor hours to total hours
- Quality-rework time
- Time allocated to non-value added activities
- Time allocated to satisfying controls placed by higher authority
- Value-chain versus control-chain time allocations
- Response time from request for service to service delivery
- Ratio of operations time to calendar time
- Workflow through the process (relative location of work centers)
- Serial versus parallel processing of transactions
- Interruptions in employee work time for non-value added activities
- Method of setting work priorities
- Supplier-process relationship.

Many of the performance gaps uncovered in this task will need to be subjected to *cause-and-effect analysis* because experience has shown that process delays are often caused by problems upstream of the process. This is the basis of instituting just-in-time methods of material movement.

1.5 Identify and Document Performance Gaps in Process Cost

Process costs should never be the direct focus of performance gap analysis. This is because all process costs are directly related to other process factors. To reduce process costs, other factors should be investigated. The direct contributors to process costs are excessive process cycle time, poor product and service quality, insufficient information about customer requirements, poor supplier relationships, and unneeded or inappropriate controls placed on processes by higher authority (excessive regulation).

Poor process cycle time itself is caused by excessive overhead, obsolete technology, poor work methods, and poorly trained personnel. Poor product and service quality has many causes, each of which has to be investigated as recommended above. Poor supplier relationships result when suppliers are not treated as partners with respect to servicing customer requirements. Inappropriate controls placed by higher authority are often the result of failing to review controls in the light of changes in the way processes are conducted.

Some cost-related performance gaps should be studied directly. These include non-process and non-product related expenditures including non-productive facilities, excessive frills and perks; unnecessary travel and living expenses; bloated staffing levels; and losses due to waste, fraud, and abuse.

1.6 Identify and Document Process-related Issues

The tasks outlined above in this step focus the process improvement team on specific measures. In this task, the team analyzes the process as a whole with respect to the way it satisfies stakeholder interests.

The questions to be asked include the following (with respect to each class of stakeholder:)

1. Who receives process outputs (or provides process inputs?)
2. What do they expect from the process?
3. How do they use the output (provide the input)?
4. What impact does it have if inputs or outputs are wrong or inappropriate?
5. How is feedback on output (input) factors generated?
6. How far beyond the primary stakeholders will errors have an impact?
7. How well can the process adapt to changing stakeholder requirements?

This is now the time to take a walk *through* the process with major stakeholders to ensure that the process as a whole is well understood before changes in the process are designed. Some of the areas of investigation include the following:

- Procedures used within the process
- Documentation used to control or support process activities
- Training programs related to process requirements
- Techniques, tools, equipment, and support services used within the process
- Facilities with respect to how they enable or constrain process performance
- Location of work centers related to location of stakeholders
- Means of communication used within the process
- How stakeholder interactions are performed, monitored, and evaluated
- Quality and accessibility of records and data needed to support the process.

At this point, it becomes possible to start thinking of the process under study in terms of subprocesses and groups of related activities. By the time the remaining tasks in this step are completed, each identifiable subprocess will be placed in one of five classifications. All data collected and analyzed from this point on should be used to aid in this determination.

The five classifications for subprocesses are:

- Discontinue or disband the subprocess
- Take no further action on the subprocess (leave it alone)
- Designate the subprocess as a candidate for continuous improvement
- Designate the subprocess as a candidate for process redesign
- Designate the subprocess as a candidate for process reengineering

1.7 Identify and Document Organizational Issues and Barriers

Process improvement is not a meaningful term apart from organizational change management. Organizational change management is dealt with as a separate phase of the process improvement methodology. At this time, the process improvement team can begin to identify problems, issues, potential barriers to change, and suggestions for organizational improvement. This should be done now, while the improvement team has a fresh understanding of process-related performance issues and gaps. This study will aid in the process classification recommendation introduced in the previous task.

The following 12 sets of questions asked and answered will help the team identify organizational issues and barriers. It is important not to try to resolve these issues at this point. This action will be taken after all the facts are discovered, investigated, and analyzed.

1. What is the level of commitment to improvement within the functional units, and how is leadership manifested?

2. To what extent are customer needs, requirements, and desires used to shape functional unit activities and priorities?

3. How well do employees understand the mission of the organization, and are education and training programs oriented toward increasing employee awareness of the importance of serving customer interests?

4. How do functional units hire, orient, develop, promote, and support employees with respect to process requirements?

5. What personal skills are valued within functional units and how are those skills developed and rewarded? How well is skill development related to supporting the value-chain within the process?

6. Are managers and supervisors trained in coaching skills, and are those skills focused on developing a high-performance unit fostering improvement and innovation?

7. To what extent is the functional unit developing team skills such as the effective use of techniques and tools, process management, problem solving, meeting/workshop management, and interpersonal skills?

8. How well are the human resource systems aligned with process performance requirements including supplier management, information management, and customer support? What are the relationships with respect to rank, responsibility, authority, and accountability? How prevalent are bureaucratic in-fighting and turf wars?

9. What are the recognition and reward systems and how are they aligned with work team practices, empowerment, customer service needs, and cross-functional cooperation? Is there an excess of *feel-good* rewards and not enough rewards for effective performance in support of mission requirements?

10. How well established are process management principles? Are there process owners in place for all major processes and subprocesses? Are quality and process improvement teams in place? Are roles and responsibilities aligned with mission and customer requirements? Are continuous process improvement principles implemented?

11. Are processes managed based on performance measures? Are measures related to delivering customer satisfaction? Are all important elements of process performance measured? Are results continuously provided to process and improvement teams? Are all

stakeholder interests related to performance and feedback measures? Are there systems in place to monitor, manage, and improve product and service quality? Is benchmarking established as a management practice? Are performance standards meaningful?

12. Is there a continuing program in place to identify and serve customer interests? Do process participants look for opportunities to develop new internal and external customers? Are customers really *in charge* of the process with respect to designing products and services and setting process priorities?[3]

Negative answers to these questions indicate that organizational change management will be a major, if not *the* major, focus of process improvement. Process improvement cannot exist in any meaningful way apart from the principles of process management. Process management is an organizational issue.

1.8 Identify and Document Technology Issues

Technology is both an enabler of change and a constraint on change. Enablers come from innovative uses of new technologies, while inhibitors are the result of the presence of legacy systems. This task is concerned with uncovering technology-related issues that need to be investigated and analyzed with respect to process management and improvement. There should be no attempt in this task to resolve technology issues, only to identify them.

As with organizational barriers, an effective way to discover technology-related issues is to ask and answer a series of questions. Until recently, technology and information management systems modeled the organizational hierarchy and as such was part of the problem with respect to adopting a process management orientation. The technology paradigm shift to networks, client-server architectures, distributed data bases, work group

computing, etc. actually is an enabler of process management and a major contributor to the breakdown in the hierarchical management model.[4]

The following questions are developed from Tapscott and Caston's book. The answers to these questions will tell a lot about the attitudes within the functional units. The attitudes will be a good indication of the probable success of any significant improvement effort, and most certainly one based on technology enablement.

1. To what degree are information systems open? Do suppliers and customers have access to process related data that affect their involvement in the process (interoperable systems)? Can information systems be ported to different hardware platforms?

2. Are systems functionally integrated to support process management requirements? Are communications networks being used to interconnect work teams wherever they are located?

3. Are distributed computing systems being put in place to help empower workers and work teams to serve customer requirements effectively and efficiently? Is *intelligence*, not just data, being made easily available to work teams so support immediate decision-making with respect to customer requests for service and products?

4. Are data collected on a real-time basis at the source and distributed to where they are needed? Are just-tin-time practices being put in place for information systems? Are information systems designed to allow processes to easily adapt to changing supplier and customer relationships?

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3   *Firing on All Cylinders*, Jim Clemmer, Business One Irwin, 1992.
4   *Paradigm Shift, the New Promise of Information Technology*, Don Tapscott and Art Caston, McGraw-Hill, 1993.

5. Are client-server systems being put in place to support cross-functional process requirements and design more efficient work flows?

6. Are peer-to-peer networks replacing mainframe-dumb terminal platforms wherever possible to support the notion of an enterprise being based on commitment rather than control, accomplishment rather than account-ability, customer service rather than serving the hierarchy?

7. Are information systems being develop according to modular concepts that support organizational independence, resulting in a flexible, adaptable enterprise? Are standardized, reuse, or object-oriented application modules being developed that can be reconfigured to serve changing needs?

8. Are systems being developed to specifically support the needs of knowledge workers rather than the needs of clerical workers? Are specialized platforms being installed to support specialized needs such as computer-aided design and drafting systems, rule-based decision making (expert systems), multimedia applications, and team-based requirements?

9. Are user-friendly graphical interfaces being designed into all systems to permit access to a wide-library of information services and systems without the need to learn a large number of specialized interfaces? Does the organization seek to maximize or limit the distribution of information technology and information systems? Is computing power being placed first with those who directly support customers, or are back-office operations given preference?

10. Are wide area networks being put in place to support stakeholders and employees wherever they may be

located? Can teams easily form and work together based on availability, expertise, and knowledge rather than on physical location or proximity to stakeholders?

In evaluating the answers to these questions, improvement teams should look for indications that functional management is receptive to change. Problems are indicated when the answers are mostly negative, and managers are satisfied with the status quo. This will be a signal to the improvement team that process reengineering efforts may not be practical at this time, and improvement efforts may have to be limited to process streamlining and redesign.

1.9   Develop Process Improvement Opportunities

By the time this task is reached, process improvement teams will have a good understanding of the opportunities for improvement that should be addressed in the next step. They will also be able to classify subprocesses. The following list can be used as a guide in organizing opportunities. All of the data collected and analyzed in previous tasks, steps and phases should be used to complete this task.

Because there will be redundancies in any such list, nominal group and data analysis techniques should be used properly to organize and group these opportunities. All opportunities should be accompanied by performance targets whenever possible. The performance cell techniques can be used to guide the effort to quantify potential improvements. This task is best completed in the workshop environment.

The improvement team should list opportunities to:

■   Improve customer service by eliminating problems and complaints

■   Improve product/service quality by eliminating errors and rejects

---

- Strengthen the value-chain by minimizing non-value added activities

- Adjust the control-chain by eliminating inappropriate controls

- Reduce process cycle time (operations, wait, overhead, quality)

- Lower process costs (fixed and variable)

- Add new services and products

- Close performance gaps in baseline-to-target measures

- Emulate best practices found during benchmarking activities

- Develop knowledge-based systems for front-line workers

- Improve workflows within processes by realigning facilities and equipment

- Make processes more flexible and adaptable to changing conditions

- Exploit new technologies (see previous task)

- Satisfy management imperatives (mission, objectives, and goals)

- Develop new supplier partnerships for just-in-time service and lower costs

- Improve work place health, safety, morale, and job satisfaction

- Balance accessibility and security requirements

- Lower risks of process failure and increase process stability

- Realign organizational structures to support process management principles

- Improve training methods in support of competency-based principles

- Reduce paper work, flows, and storage requirements

- Develop in-process performance measures for continuous process improvement

- Maximize resource and asset utilization

- Streamline and flatten organizational units and reduce unnecessary headcount

- Standardize around open systems architectures

- Eliminate and replace obsolete or expensive legacy systems

Notes for Step 1: Lay a Strong Foundation for Benchmarking Success

The following are the tasks in Step 1. Use this page to enter notes on each task, track your progress on these tasks and identify when they have been satisfactorily completed.

1.1	**Identify Critical Success Factors**
1.2	**Begin Developing the Process Notebook**
1.3	**Identify and Document Performance Gaps in Product Quality**
1.4	**Identify and Document Performance Gaps in Process Cycle Time**
1.5	**Identify and Document Performance Gaps in Process Cost**
1.6	**Identify and Document Process-Related Issues**
1.7	**Identify and Document Organizational Issues and Barriers**
1.8	**Identify and Document Technology Issues**
1.9	**Develop Process Improvement Opportunities**

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How to Prepare for and Conduct a Benchmark Project

STEP 2. SELECT BENCHMARK PARTNERS WITH BEST-IN-CLASS PROCESSES

Create the benchmark team. Then, based on the process(es) selected, conduct research to determine the benchmark partners. Contact the potential partners, narrow the lists, develop briefing packages and questionnaires, and set benchmark meeting dates and times with the final partners.

This step should be started about three weeks into the project. Once the process(es) have been identified, some members of the team can begin research on potential benchmark partners. It is not necessary for all of step 1 to be completed before beginning work on step 2.

The tasks in this step include researching for benchmark partners. The partners do not necessarily need to be within your industry. In fact, partners within your industry may pose a challenge because they most likely would be direct competitors. If such a partner is chosen, frequently the benchmark team must rely on public information rather than site visits to obtain their data. Once the partners have been identified, the questionnaires are developed and site visits are arranged.

During this step, you should continually be asking these questions:

1. What companies perform this process better?

2. Which company is best at performing this process?

3. What can we learn from this company?

4. Whom should we contact to determine if they are willing to participate in our study?[5]

2.1 Select the Benchmark Team

Ultimately, there are two benchmarking teams. The first team, and the one we're discussing here, is the team of individuals who will work on all steps of the benchmarking phase of the project. However, a subset (or subsets) of this team (three members each) will be selected later to conduct the site visits or telephone interviews.

The benchmark project team should consist of at least the following individuals

- *The process owner*
  This individual should take the responsibility of documenting the study, including collecting and compiling all of the completed forms and notes that result from each task. At the end of the study, the process owner will have a Benchmark Notebook that will document the study and can be used for future studies and on-going benchmarks and process improvement.

- *A subject matter expert (SME) on the process(es) to be benchmarked*
  This individual should know every aspect of the process that will be benchmarked or know where to get the information. However it is also important that this individual is creative, open and excited about process improvement. Someone who feels his/her turf is threatened by this project will not be valuable member of the team. As the study progresses and site visits are undertaken, this individual will be invaluable at comparing different processes and offering creative ideas for improvement.

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5 *The Benchmarking Workbook*, Gregory H. Watson, Productivity Press, 1992.

■ *A benchmarking expert*
Frequently, this individual will also act as the project manager, creating agendas, timelines, assigning tasks and ensuring that the project progresses on schedule. This individual will direct the project and ensure that all critical steps are completed before moving on to the next one.

Other individuals who would be helpful on a team include:

■ The project manager (if not one of the individuals listed above)

■ A second SME on the process to be benchmarked

■ Competent administrative assistant for information gathering and dispensing, information organization and dispersement, and telephone interference.

Note that the administrative assistant should be considered a full-fledged member of the team and attend all meetings. The more information this individual has on the project, the better support all team members will receive.

The maximum number of individuals on the large benchmark team is six. More than this becomes clumsy, increases meeting time and prohibits quick results. Fewer than five individuals may omit key players whose input could be valuable. Remember, that the site-visit team will be made up of a subset of the benchmark team.

2.2 Research the Field

To begin the search for benchmark partners, the team should consider the sources it will use to seek out the partners. The first stage of completing this task is conducting a literature search, either on-line or manually. At this point in the process, on-line searches can be costly and consume a great deal of time. Later, once you have narrowed your list, on-line databases become more cost-effective to use. Reasonable alternatives are libraries that have computerized article or key-word searches. Seek out articles about companies or practices that are:

■ Reported to be state-of-the-art or leading-edge

■ Winners of the National Malcolm Baldrige, Deming or other association awards

■ Known to have served as benchmark partners in the past (be aware that Xerox has been inundated with benchmarking requests)

■ Cited in the opinions of industry experts, customers and vendors

Malcolm Baldrige award winners have also been inundated with requests for benchmarks. Most of these organizations have set up separate departments to handle the benchmark requests. Be aware before you call, that many of the award winners are turning down all requests except those from customers or those from companies where they believe they will learn something new. You must be ready to offer something substantial to these organizations if you expect to have your request accepted.

Other avenues to follow in this task are:

■ **Professional/Trade Associations**
Professional and trade associations are probably the next step in your research. They provide a productive source of information and can serve to identify industry leaders and information on industry data.

In addition to the organizations your company is associated with, you may want to contact the following:

☛ Association for Manufacturing Excellence

☛ American Marketing Association

☛ The Strategic Planning Institute

☞ The Society of Competitive Intelligence Professionals

☞ A professional association of consultants and industry personnel who specialize in benchmarking and related skills

☞ *Encyclopedia of Associations*

■ **Clearinghouses**
The International Benchmarking Clearinghouse
Sponsored by the American Productivity and Quality Center, this organization provides the following services to its members:

☞ Locates benchmarking partners

☞ Networking with other members directly and through an on-line network

☞ Participation in Common Interest Groups and benchmarking studies

☞ Use of the Clearinghouse's Information Services to research processes you want to benchmark

☞ Instruction on how to organize and integrate your benchmarking efforts

☞ Benchmarking training

☞ Lists of Member Organization Contacts

☞ Helping you stay current on key developments in quality and benchmarking

The Clearinghouse is located in Houston, Texas, and may be contacted at (713) 685-4666. The cost to join is steep, but may pay off if your organization plans on benchmarking and adopting a continuous process improvement program. The Clearinghouse also has a special rate for government entities.

■ Business and Trade Literature
Trade publications on your own or related industries may give you information on similar processes that have achieved best-in-class status.

■ Industry Analysts/Consultants
Investment advisers and money managers are excellent sources for information on organizations. Investment-based information sources include the following. All of them highlight corporate and industry data and identify analysts. Also, Nelson's provides a listing of recent research reports by investment and brokerage firms.

☞ *Wall Street Transcript*

☞ *Institutional Investor*

☞ *Nelson's Directory of Wall Street Research*

☞ *Bradford's Directory of Market Research Agencies and Management Consultants*

☞ *Who's Who in Consulting*

☞ *Directory of Management Consultants*

■ **Third Parties**
A great source of information available to you is your own customers and vendors. Your customers can tell you who has the best on-time delivery or service and your vendors can tell you who in your industry they prefer to work with and why. If you approach these sources correctly and manage your interactions professionally, you will most likely improve your image with them, because they will ascertain that quality is important to you and you cared enough to ask them their advice.

■ **Internal Sources**
Finally, your own marketing and sales organizations may be able to offer you excellent information because they are externally focused and they deal with your competitors on a daily basis. In addition, they may have some customers who have similar processes that have been reengineered.

In addition, high-level executives in your organization probably have contacts with individuals in many other organizations.

Begin making your lists. Your first pass should yield twenty to thirty potential partners for each process. Avoid the temptation to put any company you think of on the list. Doing so will only result in unnecessary research, wasted time and dead ends.

The obvious method to obtain critical information on a company's best practices is to call up someone in that organization and ask them if they have any best practices to share relating to your process. Try to avoid doing this. This will set you and your organization up as one that doesn't know benchmarking etiquette and may hurt your chances of getting that company to consider benchmarking with you.

As you work through this process, keep in mind that there are five types of companies to consider:

■ **Direct Competitors**
Recall that it may be more difficult to arrange an on-site visit with a direct competitor, although this company may be your best candidate. You may need to rely on other sources of information if you choose a direct competitor as a benchmark candidate and are unable to obtain a site visit.

■ **Industry Noncompetitors**
These are companies that are in the same industry as yours, but may be geographically distant and therefore are not a direct competitor. For example, a regional bank in Florida may select a regional bank in Colorado as a partner - they serve the same industry and have similar products and services, but are not direct competitors.

■ **Latent Competitors**
These are companies that may be much smaller or larger than yours, and therefore do not compete in the same markets. They may also be companies that have not yet entered your industry, but could at some future date.

■ **External Industries**
These are companies that are considered best-in-class and can be considered as partners because they have similar processes, however they are not competitors because they operate in different industries. Frequently, these companies are overlooked because they are out of the suitor company's industry. This is a mistake. Often these companies have excellent best practices that can easily be translated to your organization.

■ **Internal Best Practices**
This may be a sister division or a separate operating group that has similar processes which could be used in a benchmark study.[6]

As you begin to collect company names and information, you will want to keep the information you gather in an organized fashion. The form that follows on the next two pages is an example. This form should be duplicated front to back so the critical information on the potential partner is kept on a single page.

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6   *The Benchmarking Course*, Robert A. Dutile, American management Association, 1993.

Benchmark Partner Profile			
Company Name:			
Site Address:			
Mailing Address:			
Source:			
Information Obtained on Company via Research:			
	Revenue Size:		**No. Employees:**
	Process Information:		
Contact Name:		**Phone:**	
Title & Dept:		**Fax #:**	
Admin Assistant:		**Phone:**	
		Fax #:	
Contact Name:		**Phone:**	
Title & Dept:		**Fax #:**	
Admin Assistant:		**Phone:**	
		Fax #:	

Call Record	Date:	Transaction:

Benchmark Partner Profile			
Information Sent	**Date Sent**	**Method Used**	**Sent By**
Qualification Information on Partner:			

Planned Meeting Date:		**Others Attending The Benchmark Meeting (Names & Titles)**
Confirmed/ Phone:		
Confirmed/ Letter:		
Questionnaire Sent:		
Thank You Letter Sent:		

Benchmark Report Sent:	
Travel Information & Logistics	
Flight Information:	
Hotel Reservations:	
Auto Reservations:	
Detailed Directions to Site:	

FIGURE 3. Benchmark Partner Profile

While the form may seem self explanatory, several items are clarified below:

- It is crucial that you track the source of your information. As you begin to contact the potential partners, many will want to know where or how you got their names.

- A brief synopsis should be inserted on the information you obtained as a result of your research. If you read about the organization in a magazine, you may want to attach a copy of the article to this form. However, when you're on the telephone, the synopsis will help you introduce the conversation and begin the discussion regarding benchmarking.

- Frequently, the first contact you make at the potential partner's site is not the individual with whom you will ultimately be meeting or carrying on in-depth conversations. Therefore, there are two areas on the form for contacts. If you are transferred yet a third time, use the margins so you capture all of the information on this page.

  As a professional courtesy to the individuals you talk to, find out the name and number of their administrative assistants and work through them as much as possible. This will take a time burden off the contact and enhance your position. Many times, you will need to work through the administrative assistant just to reach the contact. Solidifying this relationship on the phone can help your case when working with the contact.

- It is likely that you will make numerous calls to the contact during the benchmark project. Keep close track of the calls so you can retrace your steps and review your work to determine whether the contact is a potential partner.

- As you begin discussions with potential partners, they may request that you send them some information regarding your processes. We'll discuss this information in a later task. For now, notice that the top of second page of the form helps you track what you sent. Often, a fax transmission is satisfactory. Other times, USPS or Federal Express may be used. Tracking the date and method will ensure a way to track lost materials or confirm receipt in follow-up phone calls..

- As you begin discussions with potential partners, you will need to qualify them to ensure that they fit your requirements. Record that information to help facilitate the selection process.

- Once a candidate has been accepted, the logistical information is tracked on the bottom of the second page of the form. Send out confirmations, letters and reports; learn who else from the partner's organization will attend the meeting; record all travel plans and logistics.

For ease of organization, use a three-ring binder to store the Benchmark Partner Profile sheets and any additional information until preparation begins for the meeting. Then it will be transferred to the Interview Folder (to be discussed later).

One additional form may be helpful to track all of the potential partners. The status report (shown on the following page) lists the potential partners and the pertinent information on them. Update this report every two to three days, or more often if necessary. It will give every member of the team a snapshot of the current status of the project.

Benchmark Status Report　　　　　9 JUN 94

Prospect	Source	Progress	Status	Interview Date	Processes CR-IN
A-1 Bank	Research	Qualification	In-progress		CR
Business Direct	Referral	Initial Contact Made	In-progress		IN
Pro-Tech	Research	Not Started			
RUN Software	Referral	Key Contact Made	Dropped (3)		CR-IN
Semi-Soft, Inc.	Research	Key Contact Made Briefing Pkg Sent 6/1	In-progress	Probably will okay benchmark	CR-IN
True Alliance	Research	Not Started			
Young Sports	Referral	Key Contact Made	Accepted Confirmed	7/15 - OS	CR
Partner	Referral Research	Initial Contact Made Key Contact Made Qualification Briefing Pkg Sent Questionnaire Sent	In progress Dropped (1): No best practice in IT processes (2): Overbooked on benchmarks (3): Insufficient lead time (4): Not approved by us (5): Requested materials not satisfactory (6): Other Accepted Confirmed	Date/code OS-Onsite TC-Telecall	Priority CR-Customer Relations IN-Inventory Control

FIGURE 4. Benchmark Status Report

2.3 Narrow Your Selection

The next task is to review all of the data you have collected on the companies and narrow the list to ten to fifteen organizations per process to be benchmarked. Through your research, you should have learned something about each of these organizations that would make them a valuable partner.

Prior to creating the short list, the benchmark team creates the criteria it will use in the selection process. Consensus must be reached on the criteria and agreements made that the team will stick to the criteria. It is easy to include or drop a company based on past personal experiences with a particular organization. However, the team members must keep in mind that the benchmark project is critical the process improvement project's success and personal issues must not be brought to the table.

2.4 Qualify the Candidates

Now that you have completed the first pass, you need to research the prospective companies in further detail to learn which organizations will be the best five or six to visit on the study. Two books that will help you in this process are *Competitor Intelligence, How to Get It, How to Use It*, by Leonard M. Fuld and *Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance* by Robert C. Camp.

The following list of sources should be discussed by the benchmark team and a decision made on the approach to take when investigating the candidate organizations in more detail. It is possible to run into analysis paralysis at this point in the study. Rather, a more pragmatic, organized effort should be agreed upon and a specific stopping point should be adhered to by all members.

- **On-line Data Bases**
  This is probably the most productive source of information as this stage in the process. These data bases are a good starting point and can provide a wealth of information if time is taken to delve into your subject matter. Several on-line data bases exist that can help you quickly

focus on the material and extract critical data. Be aware that some data bases add additional charges for annual reports, 10-Ks, etc. Some of the more well-known data bases include:

- Nexis and Lexis (Mead Data Service - Annual reports)
- DunsPrint (Dun and Bradstreet - Financial information)
- Compustat (Standard and Poor's - Financial information)
- AB Information (UMI Data Courier - Library citations)
- Value Line
- Dialog
- Moody's Investment Service
- Compuserve

Now the real work begins. Contacting the candidate organizations, locating the right individuals, qualifying them as potential partners and then getting them to "yes" is a dance, not unlike selling any product or service. The individual who is selected to conduct the telephone work for the project must have all of the following skills and talents:

- Superior sales skills

- High degree of interpersonal skills

- Excellent telephone etiquette

- Tenacity

- Solid background on the entire organization and other best practices the organization may have and be willing to share with benchmark partners

- In-depth knowledge of the process to be benchmarked and the entire process improvement project

In other words, this person must be able to pursue the right individual in the candidate organization, while presenting a high degree of professionalism, but also breaking the ice with the appropriate amount of small talk. This is a critical element of the benchmark process and not a

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position to be taken lightly. Whether or not a candidate organization agrees to become a benchmark partner hinges on this individual's ability to sell the win-win situation.

In addition, this is an extremely difficult job. If you get butterflies just thinking about making a cold call or being a sales person, don't volunteer. It requires hours on the telephone, an even-toned, smiling personality that emits warmth, a sense of humor, an excellent memory and complete organization.

Nearly every major corporation in the country has become aware of and is pursuing process improvement programs. As a result, many organizations that are well known for excellent products or services have been overwhelmed with requests for benchmarking. Hewlett Packard is an excellent example. They require suitor organizations to deliver a specific set of materials to the benchmark coordinator. The coordinator relays the request and materials to the correct process owner in the organization. It is reviewed and returned with a yes or no. The process takes two to three weeks and they accept only 10 percent of the benchmark requests. The job of qualifying candidates and obtaining their assent is much harder today than it was two years ago.

In most situations, the suitor organization will need to be prepared to offer the candidate organization something equally valuable that will result in both companies gaining information. The offer of a final benchmark report may be enough for some companies. Others may be interested in other best practices in the suitor organization.

One question that often comes up in telephone conversations is "What other companies are you planning to benchmark?" The candidates ask for two reasons: first, they want to ensure that you won't also be talking with a direct competitor—they want to avoid any situation where confidential information could be leaked, even inadvertently. It's a good idea to scan your list of candidates again and ensure that you do not have any direct competitors on the list.

Second, they want assurances that you are talking to companies that are similar in size and scope to them. For example, a list of candidates comprised of AT&T, along with several other organizations with revenues of only $1 to $5 million would be inappropriate.

Another key element to remember is that in most cases, your contacts in the candidate organizations will be at the highest level you can get to. Frequently, the telephone calls are with executive vice presidents or vice presidents. Appropriate respect for the position must be maintained, but a friendly tone and atmosphere must also be achieved.

Consider the reception you may receive from your benchmark partner. Michael Spendolini and Neil Thompson of The Benchmark Partners, Inc., reported in *Total Quality Management* (July/August 1992) on a survey they conducted of twenty-three companies. They asked why the companies would screen out a request for benchmarking cooperation. They referred to the requestor as the "suitor" and the potential benchmark partner as the target. The answers they received included:

- The suitor has insufficient knowledge of their own processes (and problems)—making comparisons meaningless to both parties.

- The suitor is insensitive to (or absolutely unaware of) the time demands their request would impose upon the target. There are attitudes which reflect a sense of "entitlement" on the part of the suitor.

- There is a casual approach to making and meeting commitments (changing schedules, follow-up phone calls, letters, keeping appointments, etc.).

- There are attempts to side-step the target's organizational structure and procedures.

- There is a lack of professionalism—poor "etiquette."

The second part of this task is developing the materials that will be sent to the candidate organizations. While the initial telephone calls are being placed, the remaining members of the team can develop two sets of materials:

Briefing Package

This package introduces the purpose of the process improvement project, the organization's vision and mission, explains the specific process that is to be benchmarked and the goals and objectives the team hopes to achieve. It is a short package, designed to get attention and attract interest. Frequently, the telephoner will be requested to send some information regarding the benchmarking project. This is the first set of materials sent to a candidate organization.

Questionnaire

This is a more in-depth document. Most of the time, it is sent to candidate organizations only after they have accepted the benchmark partnership. However, some candidate organizations will want as much information as possible before committing to the benchmark. You will make the judgement of when to send out these packages. The questionnaire should contain the following sections:

- The definition of the process
- The current situation
- The objective of the benchmark program
- The criteria for selecting benchmark partners
- Critical success factors for this process
- Areas of benchmarking interest
- Benchmark discussion issues and questions
- Process model (in english, not modelling boxes)
- Specific process-related problems
- Process-related performance measures (metrics)

Developing the questionnaire for the site visit may be the most difficult part of a benchmark study. Not only what you ask, but how you ask the questions, becomes critical.

The questions you present should fall into five major categories:

- Problem definition
- Process measurement
- Process problems
- Process improvements
- Process enablers

When developing a questionnaire, consider the following guidelines:

- Review the types of questions possible, such as:
  - ☛ Open-ended
  - ☛ Multiple choice
  - ☛ Forced choice
  - ☛ Scaled

- Review examples of each type to determine its applicability and pros and cons:

  - ☛ Open-ended: "How did you choose the order entry process and computer system you have now?"

  - ☛ Multiple choice: "Why did you select the material handling equipment used for order picking?"
    ____ Vendor reputation
    ____ Cost
    ____ Ongoing maintenance support

  - ☛ Forced choice: "Would you buy again from your XYZ vendor?" Yes or No

  - ☛ Scaled: "How important was maintenance support in your choice of XYZ vendor?"

- Review the phrasing of your questions, as the wording will influence the reply. Use a balanced wording, rather than extremes, such as:

☛ How satisfactory is the uptime from your XYZ vendor?" (balanced)

☛ What is the best uptime you could expect from your XYZ vendor?" (extreme)

■ Write the questions and review them with the team for their priority sequence. Open with easy, straightforward questions. Place more difficult, important questions in the middle. Close with demographic questions.

■ Pretest the questionnaire. The most effective testing procedure is to administer it to the applicable internal operation. This process will clarify the question wording and also add or delete those questions that are appropriate. This should also help you to prioritize those questions that are of the highest interest.[7]

■ Above all, do not try to ask too many questions. Consider the amount of time you have for each visit and allow plenty of time for add-on discussion to each question. The best sign of a first-time benchmarker is a questionnaire that is far too long for the time allotted. Prepare enough in advance so that you ask only the critical information that you cannot obtain through any other source.

Remember the partners' time is limited too and that you are also trying to begin a long-term relationship. Don't ask for it all at once. It is more appropriate to start small, nurture the relationship, invite the partner to your organization and gain valuable information at each step along the way.

The sample questionnaire on the following page may help you start to develop your questions for the on-site visits.

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7 *Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance*, Robert C. Camp, ASCQ Quality Press, 1989.

Benchmarking Questionnaire Sample

1. **How do you define this process? Please describe it.**
2. **Do you consider this process to be a problem or concern in your company? If not today, was it a problem in the past?**
3. **What is the measure of quality for this process? What are the criteria that you use to define excellence in process performance? How do you measure the output quality of this process? How do you measure progress in quality improvement?**
4. **How do you consider cost and schedule in this process?**
5. **How much and what type of training do you provide for the various job categories of the process team?**
6. **What process improvements have given you the best return in performance improvements?**
7. **What company, excluding your own, do you believe is the best in performing this process?**

FIGURE 5. Benchmarking Questionnaire Sample

2.5 Accept the Candidate and Be Accepted

Generally speaking, it will take two to three in-depth telephone calls before a candidate will accept you as a benchmark partner. They will want to completely understand what you are looking for, ensure that confidentiality will be maintained and agree upon a date for the meeting. Again, expect that you will be setting dates two to three months out. The more lead time you can offer the candidates, the more inclined they will be to accept the benchmark.

2.6 Confirm Your Commitment

Once the partner has accepted, a short confirmation letter is sent, reviewing the date and time of meeting and thanking the partner for accepting the request.

Finally, before moving on to the next section of this document that deals with preparing and conducting the benchmark, we will discuss benchmarking ethics.

2.7 Benchmarking Ethics

The ethics of benchmarking are clear — benchmarking is the process of obtaining useful information to help an organization improve its processes. Benchmarking is not spying or copying. It is important that each member of the benchmarking study team understand and adhere to the International Benchmarking Clearinghouse's Code of Conduct that follows. You may want to consider including this Code of Conduct in the briefing package or questionnaire that you send to candidate partners.

The Benchmarking Code of Conduct

PREAMBLE
Benchmarking—the process of identifying and learning from best practices anywhere in the world—is a powerful tool in the quest for continuous improvement.

To guide benchmarking encounters and to advance the professionalism and effectiveness of benchmarking, the International Benchmarking Clearinghouse, a service of the American Productivity & Quality Center, and the Strategic Planning Institute Council on Benchmarking have adopted this common Code of Conduct. We encourage all organizations and individuals involved in benchmarking to abide by this Code of Conduct. Adherence to these principles will contribute to efficient, effective and ethical benchmarking. This edition of the Code of Conduct has been expanded to provide greater guidance on the protocol of benchmarking for beginners.

BENCHMARKING CODE OF CONDUCT[8]
Individuals agree for themselves and their company to abide by the following principles for benchmarking with other organizations.

1. Principle of *Legality*

   1.1 If there is any potential question on the legality of an activity, don't do it.

   1.2 Avoid discussions or actions that could lead to or imply an interest in restraint of trade, market and/or customer allocation schemes, price fixing, dealing arrangements, bid rigging, or bribery. Don't discuss costs with competitors if costs are an element of pricing.

   1.3 Refrain from the acquisition of trade secrets from any means that could be interpreted as improper, including the breach or inducement of a breach of any duty to maintain secrecy. Do not disclose or use any trade secret that may have been obtained through improper means or that was disclosed by another in violation of a duty to maintain its secrecy or limit its use.

   1.4 Do not, as a consultant or client, extend one benchmarking study's findings to another company without first obtaining the permission of the parties to the first study.

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8   *The Benchmarking Code of Conduct,* The International Benchmarking Clearinghouse, American Productivity and Quality Center, Houston, TX 77024.

How to Prepare for and Conduct a Benchmark Project

2. Principle of *Exchange*

   2.1 Be willing to provide the same type and level of information that you request from your benchmarking partner to your benchmarking partner.

   2.2 Communicate fully and early in the relationship to clarify expectations, avoid misunderstandings, and establish mutual interest in the benchmarking exchange.

   2.3 Be honest and complete.

3. Principle of *Confidentiality*

   3.1 Treat benchmarking interchange as confidential to the individuals and companies involved. information must not be communicated outside the partnering organizations without the prior consent of the benchmarking partner who shared the information.

   3.2 A company's participation in a study is confidential and should not be communicated externally without their prior permission.

4. Principle of *Use*

   4.1 Use information obtained through benchmarking only for purposes of formulating improvement of operations or processes within the companies participating in the benchmarking study.

   4.2 The use or communication of a benchmarking partner's name with the data obtained or practices observed requires the prior permission of that partner.

   4.3 Do not use benchmarking information or any information resulting from a benchmarking exchange, or benchmarking related networking as a means to market or sell.

   4.4 Contact lists or other contact information provided by the International Benchmarking Clearinghouse in any form may not be used for marketing in any way.

5. Principle of *First Party Contact*

   5.1 Initiate benchmarking contacts, whenever possible, through a benchmarking contact designated by the partner company.

5.2 Respect the corporate culture of partner companies and work within mutually agreed procedures.

5.3 Obtain mutual agreement with the designated benchmarking contact on any hands-off communication or responsibility to other parties.

6. Principle of *Third Party Contact*

   6.1 Obtain an individual's permission before providing his or her name in response to a contact request.

   6.2 Avoid communicating a contact's name in an open forum without the contact's prior permission.

7. Principle of *Preparation*

   7.1 Demonstrate commitment to the efficiency and effectiveness of benchmarking by being prepared prior to making an initial benchmarking contact.

   7.2 Make the most of your benchmarking partner's time by being fully prepared for each exchange.

   7.3 Help your benchmarking partners prepare by providing them with a questionnaire and agenda prior to benchmarking visits.

8. Principle of *Completion*

   8.1 Follow through with each commitment made to your benchmarking partner in a timely manner.

   8.2 Complete each benchmarking study to the satisfaction of all benchmarking partners as mutually agreed.

9. Principles of *Understanding and Action*

   9.1 Understand how your benchmarking partner would like to be treated.

   9.2 Treat your benchmarking partner in the way that your benchmarking partner would want to be treated.

   9.3 Understand how your benchmarking partner would like to have the information he or she provides handled and used, and handle and use it in that manner.

Benchmarking Protocol

Benchmarkers:

1. Know and abide by the Benchmarking Code of Conduct.
2. Have basic knowledge of benchmarking and follow a benchmarking process.
3. Prior to initiating contact with potential benchmarking partners, have determined what to benchmark, identified key performance variables to study, recognized superior performing companies, and completed a rigorous self-assessment.
4. Have developed a questionnaire and interview guide, and will share these in advance if requested.
5. Possess the authority to share and be willing to share information with benchmarking partners.
6. Work through a specified host and mutually agree on scheduling and meeting arrangements.

When the benchmarking process proceeds to a face-to-face site visit, the following behaviors are encouraged:

- Provide meeting agenda in advance.
- Be professional, honest, courteous, and prompt.
- Introduce all attenders and explain why they are present.
- Adhere to the agenda.
- Use language that is universal, not one's own jargon.
- Be sure that neither party is sharing proprietary information unless prior approval has been obtained by both parties, from the proper authority.
- Share information about your own process, and, if asked, consider sharing study results
- Offer to facilitate a future reciprocal visit.
- Conclude meetings and visits on schedule.
- Thank your benchmarking partner for sharing their process.

Etiquette and Ethics

The following guidelines apply to both partners in a benchmarking encounter with competitors or potential competitors:

■ In benchmarking with competitors, establish specific ground rules upfront, e.g., "We don't want to talk about things that will give either of us a competitive advantage, but rather we want to see where we both can mutually improve or gain benefit."

■ Do not ask competitors for sensitive data or cause the benchmarking partner to feel they must provide data to keep the process going.

■ Use an ethical third party to assemble and "blind" competitive data, with inputs from legal counsel in direct competitor sharing. (Note: When cost is closely linked to price, sharing cost data can be considered to be the same as price sharing.)

■ Benchmarkers should check with legal counsel if any information gathering procedure is in doubt, e.g., before contacting a direct competitor. If uncomfortable, do not proceed, or sign a security/nondisclosure agreement. Instead, negotiate a specific nondisclosure agreement which will satisfy the attorneys from both companies.

■ Any information obtained from a benchmarking partner should be treated as internal, privileged communication. If "confidential" or proprietary material is to be exchanged, then a specific agreement should be executed to indicate the content of the material which needs to be protected, the duration of the period of protection, the conditions for permitting access to the material, and the specific handling requirements that are necessary for that material.

Notes for Step 2: Select Benchmark Partners
with Best-in-Class Processes

The following are the tasks in Step 2. Use this page to enter notes on each task, track your progress on these tasks and identify when they have been satisfactorily completed.

2.1	**Select the Benchmark Team**
2.2	**Research the Field**
2.3	**Narrow Your Selection**
2.4	**Qualify the Candidates**
2.5	**Accept the Candidates and Be Accepted**
2.6	**Confirm Your Commitment**
2.7	**Benchmarking Ethics**

STEP 3. PREPARE FOR THE BENCHMARK

Develop agendas, train the benchmark teams on their responsibilities, complete travel plans and logistics.

This step can be started about the seventh week into the project. While prospective partners are being contacted and confirmed (step 2), the benchmark teams are trained, travel plans are completed and final preparations for the meetings are made. Note that all tasks in step 3 must be complete before beginning step 4.

At this point, several benchmark partners have been identified and qualified. Now it is time to prepare yourselves for the benchmark site visits. Then, the next step is to visit these benchmark partners and collect relevant information that can be used to develop best practices in the selected processes, and establish stretch performance targets as expressed in metrics and measures.

The final step in the benchmark program is to assemble and collate all of the data collected during the site visit phase into a benchmark report that includes conclusions and recommendations as well as an action plan.

The usefulness and applicability of the benchmark report will be based primarily on how well the benchmark teams collect and organize the data and information they gathered during the site visits.

Benchmark teams should understand that a version of the benchmark report will be sent to all benchmark partners. The external distribution version will differ from the internal version in that companies and individuals will not be identified, and your conclusions, recommendations, and action plan will not be included.

The success of the benchmarking process will be based primarily on three activities:

1. The extent to which the benchmarking team prepares for the interview.

2. How well the interview is conducted.

3. The post-interview debriefing process to ensure that all data is collected, organized and analyzed. The results of the debriefing will determine the ultimate value of the final benchmark report.

As the benchmark site interview process begins, all boxes and tables should be completed in the sequence presented in this tutorial.

3.1   Assemble Interview Folder

One of the keys to success for a benchmarking expedition is to become and to remain highly organized throughout the process. One of the best ways to do this is to assemble a Site Interview Folder (or notebook) for each site visit and keep it current until the benchmark process is complete.

Some benchmark teams find it helpful to carry a pocket folder with a flap to store handout material provided by the partner. The important concept is to keep all data, information, and related documents together and organized so that information is not lost.

The contents (tabs) of the Site Interview Folder are as follows:

1. Benchmark partner's company name, contact name, full address, telephone and FAX number

2. Copy of itinerary with all travel confirmation numbers

3. Meeting location and time

4. Map to location from airport or hotel

5. Sufficient business cards

6. Summary materials received from partner prior to visit

7. Process data (models/narratives/metrics/ targets) including copies of the materials discussed in task 3.2 below.

8. Partner benchmark profile and company data.

9. Final agenda and questionnaire—Note that each team member should have two versions of the questionnaire. One version will be a list of the questions. The second version will be the questions with plenty of room to write the answers and discussion data under the question.

10. Forms/paper to record notes and ideas

11. Team preparation notes (from the pre-interview briefing discussed later)

12. Extra copies of handout materials

Use the table on the next page to customize the contents of the site interview folder as you wish.

Benchmark Team Site Interview Folder		
Tab	**Contents**	**Source**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

FIGURE 6. Benchmark Team Site Interview Folder

3.2 Reaffirm Benchmarking Purpose

The benchmarking process has been institutionalized to the extent that all experienced benchmark partners have a set of expectations that must be met if you are to be recognized as a worthy benchmark partner. One of the chief expectations is that the benchmark team can articulate a clear purpose for conducting the site visit during the initial phase of the site visit. While briefing packages have been sent to all partners, it is important to reaffirm the purpose goals and objectives of the site visit.

To prepare for this, each benchmark team should complete the following tasks prior to the first benchmark interview.

3.2.1 Mission Statement

Develop and record a short benchmark mission statement. This statement should succinctly state why you are engaged in a benchmarking program, the principal benefit to be achieved, and recognition of benchmark partner interest. Do this now.

Once completed, the mission statement should be included in the site visit folder.

Benchmark Mission Statement

FIGURE 7. Benchmark Mission Statement

3.2.2 Goals and Objectives

Once the mission statement is agreed upon, the benchmark team should list at least three main goals and objectives they intend to accomplish during the site visit. It is best if the team develops a separate list of goals and objectives for each benchmark partner based on the available information about each partner.

The purpose of this exercise is to ensure that the team gathers the most critical and useful information from each partner. During the site visit, it is easy to lose focus in the interchange of ideas that takes place in the interview process.

Select one of the benchmark partners (preferably the first one that will be visited) and identify and record three goals and objectives that the team intends to accomplish during the site visit.

3.2.3 Process Definition

By this time, each team has a clear process definition established and documented in IDEF models. It will be necessary to brief each benchmark partner on the characteristics of each of the processes that will be benchmarked.

You will want to include the context diagram for each process in the site visit folder. Be prepared to give a five minute briefing on each process using the context diagram as a visual aid. You may want to briefly present the next level decomposition of each process but do not get into the details of these activities. It is only necessary that the benchmark partner understand the context of each of the processes to be compared.

Using a context diagram for one of your processes, practice giving a five minute briefing on this process. You may include one of more of the following points in your presentation:

Site Visit Goals and Objectives	Partner _____
1	
2	
3	

FIGURE 8. Site Visit Goals and Objectives

Process Briefing Notes	**Process Name**_____

FIGURE 9. Process Briefing Notes

1. Process purpose

2. Process strengths and weaknesses

3. Why this process is being benchmarked

4. What functional units participate in the process

5. How the process relates to your business strategy

While one of the team members is giving the briefing, other team members should take notes in the following box. These notes can be used to sharpen the briefing prior to the first site visit.

3.2.4 Process Stakeholders

Each ICOM in the process context diagram should be fully defined. These definitions (or at least a synopsis) should be included in the site visit folder as back up reference material. Each ICOM has a person(s) or department(s) associated with it. These are collectively called process stakeholders. Every stakeholder has an interest in the process, and every stakeholder can contribute to, or detract from, process performance. Process improvement or reengineering is in large part a matter of optimizing a process to serve all stakeholder interests.

Benchmarking can help identify new ways to recognize and serve stakeholder interests. Therefore, the more that is known about process stakeholders, the more focused the benchmark

interview can be on obtaining information from the benchmark partner on how best to satisfy these interests.

At this time, the benchmark team should ensure that they have captured the identity of all major process stakeholders and have articulated their most critical interests in process performance. A synopsis of this information should be added to the site visit folder as back up material.

3.2.5 Key Process Measures

A major purpose of benchmarking is to identify process measures and best-in-class performance targets that can be used as input to the TO-BE modeling process.

All available process measures, current performance, and envisioned performance target should be developed and recorded prior to the first site visit. It is helpful if measures are categorized by type:

Fitness-for-purpose (FFP): These measures record how well the process is satisfying stakeholder interests, requirements, and desires. They are effectiveness measures.

Conformance-to-Standard (CTS): These measures record how well the process is conforming to rules, regulations, standards, requirements, specifications, etc. They are quality measures.

Cycle Time (CT): These measures record how responsive the process is. They are efficiency measures.

Process Cost (PC): These measures record the fixed or investment costs associated with the process. They are overhead measures.

The following chart can be used to record key measures that can be discussed with benchmark partners:

3.2.6 Critical Success Factors

The critical success factors that have been identified for each process should be the principle focus for the on-site interview. Most of the questions and discussion issues should relate to these factors. Along with the goals and objectives of the benchmark process recorded above, the CSFs help keep all site activity properly focused.

Process Measures	Process _____	
Category	**Measure Name**	**Current Performance**
FFP		
CTS		
CT		
PC		

FIGURE 10. Process Measures

Critical Success Factors have already been developed for each process. The benchmark team should review them now and make modifications or changes as appropriate. The key question for the benchmark team is: "Do my critical success factors fully express my areas of interest during the benchmark interview." If the answer is no, they should be supplemented with factors that do.

Be sure to include a set of critical success factors in the site folder as back up material.

3.2.7 Major Process Problems

Benchmarking has evolved to be an open, honest, sharing experience conducted in a spirit of trust between two organizations sincerely interested in learning from each other. This means that the benchmark team must be prepared to discuss process-related problems with the benchmark partner with the understanding that introducing a problem is an admission of imperfection in the organization. If this is a big problem for a benchmark team member, then that person shouldn't participate.

At this time, the major process-related problems should be recorded and included in the site folder to ensure that each of them is introduced and discussed during the interview.

Due to time limitations, only the most critical problems should be listed and discussed. There will not be time to solve all process problems during the interview.

Process-Related Problems	**Process**_____
1	
2	
3	
4	
5	

FIGURE 11. Process-Related Problems

3.2.8 Common Benchmark Protocol Problems

We will conclude this task by again listing five common problems recorded by experienced benchmark partners. The following list was compiled by the American Management Association.

1. The suitor has insufficient knowledge of its own processes and problems that inhibit making meaningful comparisons.

2. The suitor is insensitive to (or absolutely unaware of) the time demands their request would impose upon the target. There are attitudes which reflect a sense of "entitlement" on the part of the suitor.

3. There is a casual approach to making and meeting commitments (changing schedules, follow-up phone calls, letters, keeping appointments, etc.)

4. There are attempts to side-step the target's organizational structure and procedures.

5. There is a lack of professionalism or poor "etiquette" on the part of the benchmark team members.

The benchmark team must remember no organization is obligated to participate in the benchmark program and for those that do, there is considerable time and expense associated with it. All team members should consider themselves invited guests even if we did invite ourselves.

3.3   Team Assignments and Roles

The success of the benchmark site visit depends most on two elements. One is preparation which was discussed in task 3.2, the second is on team performance.

The ideal benchmark team is comprised of three persons with specific assigned roles and responsibilities. Up to this point, the benchmark team has been comprised of five to six people. Select a subset of the six people to go on the site

visits. A different subset can go on different site visits, so all team members have a chance to participate in this part of the benchmark.

The best results from an on-site visit are obtained when the focal point of your team is on one person. This allows for a more intimate and informative conversation with the benchmark partner. The other two team members play an important, but subordinate role. The three roles are described below.

If there are more than three team members, the site interview process will most likely degenerate into a cross-briefing that reveals little useful information. There must be a certain rapport established that is more easily obtained in the time available with a small team.

Questioner

The questioner is the lead person on the benchmark team. About 80% of all the words spoken by your team should be from the questioner. This provides control as well as focus for the interview process. The duties and responsibilities of the questioner are:

1. Establishes rapport with the benchmark partner's team by engaging in small talk prior to the formal interview. At least 15 minutes should be dedicated to "breaking the ice" and establishing a relaxed atmosphere.

2. Introduces the team, explains the role of each team member, and briefs the benchmark partner on your organization and the processes to be examined.

3. Controls the interview process by acting as the focal point for the idea exchange.

4. Asks all or most of the interview questions. After asking each question, the questioner listens to the answer intently taking few if any notes about what the benchmark partner's team says. The intensity of listening to the speaker will encourage him or her to speak openly and give full answers.

5. When the partner's team is asking questions, the questioner gives most of the answers. Obviously, if one of the other team members is more qualified to answer a specific question, that person should do so.

6. When time, the questioner closes the interview, summarizes the key benefits obtained, thanks the partner's team, and reviews the next steps in the partner relationship that has been established.

   The next steps can include a return visit, an invitation for a reciprocal visit by the partner, a commitment to send the summary report when available, and an exchange of phone numbers.

Recorder

The recorder is responsible for gathering, organizing, and recording all of the data and information obtained during the site visit and interview process. The recorder should be capable of writing fast and writing clearly. Unfortunately, the recorder may not use a recording device to capture information. The presence of a recording device, even if agreed upon by the partner, will stifle open and forthright communications. The recorder's duties are:

1. Records the benchmark partner's answers to the questions on the questionnaire and any additional questions asked by the other team members.

2. Strives to record information in an organized fashion to facilitate the debriefing and report writing process. Immediately after the interview, the recorder must clean up all notes so that the information gathered can be used by others.

3. Answers some questions where the subject matter is in the recorder's area of expertise.

4. Refrains from asking all but the most urgent questions. The recorder's focus should be on information gathering and organizing which requires the recorder's full concentration.

5. Collects any handout material provided by the benchmark partner.

6. Re-writes notes as soon as possible after leaving the benchmark site. It is most useful if the recorder carries a laptop which can be used for this purpose.

Monitor

The third member of the team serves a critical function. This person does not ask or answer questions, but rather absorbs everything that happens during the site visit and throughout the interview process. The monitor should be completely familiar with the Benchmark Code of Conduct and take responsibility on behalf of your team to follow it throughout the period of site visit. The monitor:

1. Observes the interviewing process and tries to understand the true meaning behind all that is said. Short notes may be taken, but the monitor should not try to record all that is being said.

2. Asks follow up and clarification questions when the questioner may have missed a key statement or failed to recognize an opportunity to ask a probing question.

3. Answers few questions except those within the monitor's area of expertise.

4. By observing and listening, seeks to discern hidden meanings in what is being said. In some cases, the monitor may ask a clarifying question, but in others, it may be best to say nothing. The monitor must discern what and what is not appropriate to follow up on.

Benchmark Team Assignments		Partner_____
Role	**Assigment**	**Additional Duties**
Questioner		
Recorder		
Monitor		

FIGURE 12. Benchmark Team Assignments

5. Manages the interview session and ensures that the process starts and stops on time. The monitor should keep the agenda and ensure that all points are covered.

6. The interview process is intensive. The monitor needs to keep the session moving along especially if any problems or conflicts appear to be developing. The monitor may call for a break if participants appear to need one.

7. Guards against protocol lapses and intervenes if the discussion starts to get into inappropriate areas.

At this point, the role of each team member should be established.

Next, a draft agenda and time schedule should be developed. The final agenda will be developed prior to leaving for the site visit. Be sure to include those agenda items you expect the benchmark partner to perform.

For example, the first agenda item will be the welcome and introductions. The second item could be to review and amend the agenda. The third item will probably be the process briefing. The fourth may be the time for the partners to brief on their organization.

Draft Agenda		Partner_____	
From	**To**	**Agenda Item**	**Responsibility**

FIGURE 13. Draft Agenda

How to Prepare for and Conduct a Benchmark Project

Benchmark Program Schedule Board	
Where Located;	
Maintained by:	
Update Frequency:	

FIGURE 14. Benchmark Schedule Program Board

The agenda is an important part of the benchmark protocol. Once the agenda has been reviewed and accepted by the partner, every effort should be made to follow it. This is one of the duties of the monitor.

3.4 Travel and Logistics

Nothing can more quickly destroy a benchmark site visit than logistical problems. All logistics and travel arrangements must be made with great care. The best approach is to have a single person assigned to, and accountable for, all logistics and travel arrangements. This person should also be available to help make in-process adjustments if schedules change or travel problems develop.

3.4.1 Establish Benchmark Schedule

The first step is to develop and maintain a central schedule with team assignments throughout the benchmark site visit process. This schedule can be either a manual board or a computer program. The important point is that it be kept current.

The schedule board should show (at a minimum) the following data:

1. Partner name and city
2. Contact name, telephone, and fax number
3. Interview date
4. Flight and arrival time
5. Hotel and phone number
6. Local transportation option
7. Benchmark team

3.4.2 Review Team Assignments

As the benchmark schedule is developed, each team member must confirm availability to participate. Sometimes, other duties may prevent a team member from participating in a benchmark visit. In this case, it is best to find a substitute team member rather than trying to reschedule the visit. The substitute team member must be made aware of the role he or she will be playing during the site visit.

Benchmark team leaders should be aware of the difficulty in establishing a date with the benchmark partner. Once the date is confirmed, it can only be changed, if at all, under the most extreme conditions.

3.4.3 Organize and Optimize Itinerary

Since each team may be making more than one site visit, it is necessary to optimize the benchmark schedule to the extent this is possible. As the schedules are made the following considerations should be taken into account:

1. Only one site visit per day may be scheduled.

2. The recommended interview slot is 9:00 am to 2:00 pm. In some cases, the interview may be scheduled until 3:00 pm. The 9:00 am start allows the benchmark partner to get organized, while the 2:00 pm finish allows time for the benchmark team to properly debrief (a 2 to 3 hour process).

3. Air travel must be completed the night before the interview. Do not attempt to

schedule a flight for the morning of the interview. Too many things can go wrong when traveling by air. Just as important, the benchmark team can use the night before in the hotel to go over their strategy for conducting the benchmark interview. Do not schedule the returning flight too close to the planned meeting end time. Wait time in the airport can be used to debrief the meeting.

4. Ask the benchmark partner to recommend a hotel closest to the site. In some cases, the partner may even offer to make the reservations.

3.4.4 Make Travel Arrangements

One individual should be responsible for making all travel arrangements for all benchmark team members. This is critical to avoid foul-ups and travel glitches. The following should be taken into consideration when making the arrangements

1. Be sure to obtain confirmation numbers for all hotels and rental car reservations.

2. Obtain a map from the benchmark partner showing how to get from the airport to the hotel, and from the hotel to the site. Generally, the benchmark partner will be pleased to fax such a map. In addition, ask for explicit directions on how to enter the partner's facility. This information includes where to park, what entrance to use, and how the entrance is labeled.

    Be sure to ask about security arrangements including taking in computers, cameras, and recording devices.

    Please note that the benchmark interview may take place at a location different from the mailing address of the partner. Do not rely on the mailing address to get to the interview site.

3. All travel and logistics data should be included in the site visit folder. Also be sure to take all contact names and phone numbers.

4. As a courtesy, you may want to let the benchmark partner know which hotel you are staying in so that you can be reached if necessary. You may even find that the benchmark partner may suggest dinner together which would considerably increase the value of the benchmark visit.

3.5 Confirm On-Site Interview

Three forms of confirmation are used after a site visit has been scheduled.

Letter

As soon as possible after the benchmark site visit has been scheduled, a final package of materials should be express mailed to the benchmark partner. This package should contain a brief description of the processes to be benchmarked, the final questionnaire, the names of the team members, a thank you for participating, and an offer to schedule a reciprocal visit to your organization in the future.

Telephone call

The business world is a hectic place. Schedules are disrupted, unforeseen events occur, and other priorities can intrude on the best of plans. One week prior to the site visit, call the key contact and confirm the date, time, and place of the benchmark interview.

Besides being a courteous act, this call will help ensure that other priorities do not displace the benchmark interview or prevent key people from attending. It's important to remember that the partner does not need to participate and we need to reinforce the level of importance you place on the benchmark interview.

At this time, it is useful to quickly (in two minutes) review the benchmark protocol or process that you will use to conduct the interview.

1. Review/revise agenda

2. Each company will give a short briefing on their organization and processes

3. You will ask the questions on the questionnaire sent as part of the final package

4. You will take written notes but will not use recorders or laptops

5. You will follow the Benchmark Code of Conduct.

Obtain the names, titles, and functions of the people who will be attending the meeting. This will enable the team to familiarize themselves with peoples' names in advance.

Fax

Two days prior to the site visit, FAX the following information to the benchmark partner:

1. Final confirmation of date, time, and place of the meeting

2. Flight number and arrival time if flying in the day of the meeting or hotel and phone number if arriving the night before

Benchmark Preparation Checklist			
Action Items	Due Date	Assigned	Done
Benchmark Company			
Key Contact			
Visit Confirmed			
Team Assignments Made			
Read Ahead Sent			
Travel Arrangements Complete			
Tape Recorder and Laptop Secured for Trip			
Meeting Agenda Prepared			
Confirming Telecall			
Confirming FAX			
Site Map and Directions Received			
Site Interview Folder Complete			
Mission, Goals and Objectives Reviewed			
Benchmark Contact Names Memorized			
Site Interview Folder Materials Reviewed			
Preparations Complete			

FIGURE 15. Benchmark Preparation Checklist

3.   Your team member names

4.   Proposed meeting agenda.

      Finally, review the following checklist to ensure that you have not omitted any critical element in your preparation for the site visit.

3.6   Final Benchmark Team Preparation

The night before, or the morning of, the benchmark meeting, the benchmark team should spend one to two hours making final preparations for the interview. The following items should be covered during this review:

1.   Review the agenda and team assignments. Each team member should understand the role he or she will play and the agenda items they are responsible for.

2.   Review all materials sent by the benchmark partner. These materials may suggest areas of investigation that are not covered by your questionnaire. Form new questions and write them in the appropriate place in the questionnaire. Questions not written down in advance will probably be forgotten during the interview process and not get asked.

3.   Review all materials in the site visit folder. It is worth the time and effort to review the benchmark mission, goals and objectives and all of the process-related data in the folder.

4.   Review the six common process-related factors that must be understood during the interview. The team member who has the *monitor* role should ensure that the questions and discussion issues brought up during the interview eventually answer all of these questions.

—   What are their process performance goals?

—   How well do their processes perform over time and at multiple locations?

—   How do they measure process performance?

—   What enables the performance of their process? There are three classes of enablers: Process characteristics, people and organization, and technology.

—   What barriers had to be overcome to achieve process performance objectives?

—   What factors could inhibit the adaptation of their processes into our company?

The benchmark team should review the answers to the first five questions as they apply to your processes, even if the answer is "we don't know, or don't have that data."

Process-Related Questions and Answers	Process_____
Performance Goals	
Performance over Time/Distance	
How Measured	
Performance Enablers	
Performance Barriers	

FIGURE 16. Process-Related Questions and Answers

5. Test to ensure that each team member has memorized each key contact's name.

6. Read each question of the questionnaire out-loud to ensure that the question sounds good and makes sense. Make any adjustments now.

7. Review the material in this tutorial for any last minute preparations. Especially review the Benchmark Code of Conduct found in Step 2 of this booklet.

8. Review the site map and make sure that the directions seem clear.

These preparations will dramatically improve the value of the benchmark process for you. The results of this preparation will be evident to the benchmark partner and will convey a spirit of professionalism which will be appreciated.

Notes for Step 3. Plan for Productive Benchmark Sessions

The following are the tasks in Step 3. Use this page to enter notes on each task, track your progress on these tasks and identify when they have been satisfactorily completed.

3.1	**Assemble Interview Folder**
3.2	**Reaffirm Benchmarking Purpose**
3.2.1	**Mission Statement**
3.2.2	**Goals and Objectives**
3.2.3	**Process Definition**
3.2.4	**Process Stakeholders**
3.2.5	**Key Process Measures**
32.6	**Critical Success Factors**
3.2.7	**Major Process Problems**
3.2.8	**Common Benchmark Protocol Problems**
3.3	**Team Assignments and Roles**
3.4	**Travel and Logistics**
3.4.1	**Establish Benchmark Schedule**
3.4.2	**Review Team Assignments**
3.4.3	**Organize and Optimize Itinerary**
3.4.4	**Make Travel Arrangements**
3.5	**Confirm On-Site Interview**
3.6	**Final Benchmark Team Preparation**

STEP 4. CONDUCT A THOROUGH BENCHMARK

Gather data on best-in-class companies through site visits, telephone interviews and questionnaires. Define the practices in use in both your organization and that of your partner and compare and contrast them. Debrief after each benchmark meeting to ensure all information was received and recorded accurately.

Step 4 should begin about the eleventh week of the project. All tasks and sub-tasks for steps 1, 2 and 3 must be completed before embarking on step 4.

If the benchmark team has completed all the recommended preparatory work, the interview itself will be an enjoyable, informative, and mutually beneficial experience.

All the conventions of a standard business meeting apply — timeliness, professional courtesy, business-like meeting management, open and honest information exchange.

4.1 Guidelines

Robert C. Camp recommends the following guidelines for the interview process which have been customized for this tutorial:

4.1.1 General Interview Requirements

- Ask only for that data and information which you would be willing to share. The rule is reciprocity.

- Ensure that the focus on the interview is on industry best practices. This means that discussion about external customers, suppliers, and other stakeholders is generally inappropriate and should be avoided.

- Seek to ensure that both organizations benefit from the benchmark interview. A free flow of appropriate information will contribute to this objective. The corollary is to ensure that the interview is not one sided and only benefits you and your organization.

- Data and information that are confidential or proprietary must remain so. In general, this means that the discussion should avoid such areas as cost data, employee data, competitive data, trade secrets, and data about products and services that are in development.

- Use the business test: If this visit were covered by the press in an article written under a byline, would there be any reason for concern?

4.1.2. Specific Interview Requirements

- Where an information-gathering practice appears questionable, contact legal counsel.

- If confidential information is to be shared, obtain all necessary clearances in advance.

- Information on internal costs, prices, pricing policies, marketing strategies, marketplace activities, and customer information is *absolutely* inappropriate.

4.1.3 Basis for Information Sharing

- Information sharing should be limited to current and future best practices.

- Information should be shared on a reciprocal basis.

- Information that is requested should be only that which the organization has prepared for sharing.

4.1.4 Follow the Agenda

The purpose of the site interview is to collect information, ensure that your questions are answered completely, and record all information in a way that can be used to develop a benchmark report with analysis, conclusions, recommendations, and an action plan. This means that the agenda should be agreed to at the start of the meeting and followed throughout.

While social conventions are honored during the interview, it is important to remain aware that this is not a social event. The tone should be cordial and professional. The longer term objective is to establish a basis for continued interaction.

4.1.5 Meeting Conventions

Use the first part of the interview to introduce all participants and establish rapport. Do not continue with the agenda until everyone present in the meeting room has been introduced and the reason for their participation established.

Schedule frequent breaks so that the benchmark team can evaluate the progress of the interview and identify areas that need follow up or clarification.

Make midcourse corrections (modify the questionnaire or sequence of questions) to pursue interesting revelations.

Ensure that the verifications and clarifications needed are obtained during the visit and that a plan is in place to send any additional information after the visit.

Carry out the planned team assignments but if for any reason it seems appropriate to switch roles, do so. This could happen, for instance, if the key benchmark partner seems to favor talking to a team member other than the one who has the role of questioner.

Ensure that the agenda is covered in the allotted time frame. The meeting should be extended beyond the agreed upon stop time only in unusual circumstances and only if the partner invites your team to stay.

4.1.6 Note Taking

It is not possible to record every word that is spoken during the interview. Only key ideas can be noted. This is the reason for the role of recorder and why the recorder should not try to ask too many questions.

Record most notes on the question sheet. The expanded version should have ample room for note taking. Benchmark partners will often use overheads to brief on their processes. Ask for copies (which will almost always be given) and take notes on the copies. Try to key any notes taken on overhead copies back to the appropriate questions in the questionnaire.

Group data recorded into process steps and understand which factors exert a causal effect on process performance (process enablers and barriers). Use the following chart to capture general process information. It is a copy of the one the team completed for its own processes.

How to Prepare for and Conduct a Benchmark Project

Partner Process-Related Questions and Answers	Process _____ Partner _____
Performance Goals	
Performance over Time/Distance	
How Measured	
Performance Enablers	
Performance Barriers	

FIGURE 17. Partner Process-Related Questions and Answers

During breaks when your team is conferring amongst yourselves, it is permissible to use the tape recorder to take oral notes and to summarize the information gathered since the last break. It is good practice to inform the partner that you will be doing this. You should not expect this to be a problem.

Incidently, the reason the tape recorder may not be used during the interview is that it will inhibit the free exchange of information. Few people will speak openly if their words are being recorded.

4.1.7 Monitoring

The team *monitor* should try to think in cause and effect terms during the interview. If the partner describes a process *effect*, the monitor should listen for an explanation of the *causes* of this effect. If the partner describes a cause, then the monitor looks for what effect this cause has. As appropriate, the monitor can ask the necessary questions that establish the cause and effect couplet.

4.1.8 Concluding the Interview

Once the agenda has been completed and the time allotted for the interview expired, the monitor should promptly bring the meeting to a close. The closing process includes the actions in the table.

Benchmark Interview Closing Actions	
Closing Actions	**Check**
Suggest that it is time to bring the meeting to a close	
Thank the partner for cooperating in the benchmark	
Summarize the key benefits achieved during the interview	
Verify all commitments to send additional documents	
Offer to host a benchmark at your organization on a future date	
Relate the next step which is to prepare the benchmark report	
Assure the partner that a copy of the external version will be sent	
Provide a contact name and telephone number	

FIGURE 18. Benchmark Interview Closing Actions

4.2   Perform a Post-Interview Debriefing

Immediately after concluding the benchmark interview, the team should debrief the interview while events are still fresh in every team members mind. Both the tape recorder and the laptop can be used to capture debrief data.

The benchmark partner will almost always provide a conference room for this purpose if asked. In most cases, the meeting room will remain available for this purpose. The debriefing should take no more than an hour. If it is not possible or convenient to remain on site for the debriefing, it should be done as soon as the team reaches their hotel or the airport.

This is also the best time to quickly arrange the notes in some useful order. If the monitor has also taken notes, they should be collated with the recorder's notes. Any materials provided by the partner should be labeled if necessary and tagged to the questionnaire or other information gathering forms that were used.

The intent of the debrief is to ensure that the information gathered can be used to develop the benchmark report. For this to be the case, all shorthand notes, cryptic comments, and illegible scribblings need to be translated into usable English.

The best way to debrief is to go through the questions on the questionnaire one-by-one and tape record the team members' reactions to each question based on what they heard. The same is true for any data gathering forms that were used. It is also useful to review any handouts provided by the partner and record team members' comments about what the handout means.

Particularly useful is to compare assumptions with observations, and causes with effects with respect to the processes discussed. It may be helpful to remember the "six faithful serving persons:" Who, What, When, Where, Where, and How during the debrief.

Do not get into a lengthy debate on any issue during the debrief. It is sufficient to record everyone's comments and move quickly through the questionnaire while the facts and impressions are still fresh. The material can be debated later when you return to your offices.

After the benchmark team returns, audio tapes should be immediately transcribed and data collected on the laptop cleaned up and printed.

As soon as the transcripts are available, the benchmark team should engage in a facilitated discussion on the benchmark results with other reengineering team members. The groupware facility can be used for this purpose. The objective of the discussion session is to organize the data collected and to begin the analysis phase of the benchmark.

At this time, marginally useful data can be discarded, and the remaining data organized for maximum usefulness with respect to developing TO-BE activity models. The chart on the next page can be used as a guide to organizing process related data in its most useful form for process improvement.

Data gathered during the research phase of the project including annual reports, 10Ks and 10Qs, magazine articles, and research and industry reports can be used during this debriefing session as an aid to relating the benchmark data collected to publicly available data.

After all benchmark visits have been conducted, the analysis phase can be continued using all of the available data. But because of the time delay from the first benchmark to the last, the debrief sessions are critical if useful data is not to be lost.

Partner Debriefing Chart	Process _____ Partner _____
Performance Goals and Targets	
Critical Success Factors	
Process Performance over Time/Distance	
How Performance is Measured: Cycle Time, Quality, Service, Cost	
Performance Enablers: Organization	
Performance Enablers: Technology	
Performance Barriers and Lessons Learned	

FIGURE 19. Partner Debriefing Chart

The analysis phase of the benchmark program and the details on how to write the final benchmark report with conclusions, recommendations, and action plans are covered in the next step in this tutorial.

4.3 Telephone Interviews

The principle difference between a telephone interview and an on-site interview is flexibility and breadth of subjects explored. A telephone interview must stick closely to the questionnaire that was prepared in advance and sent to the benchmark partner.

As with on-site interviews, the team members assume the same roles of questioner, recorder, and monitor. Since the interview process closely follows the questionnaire, it is generally more acceptable to the benchmark partner to audio record the conversation. Of course permission must be granted in advance. It is good practice to suggest that the recorder can be shut off at any time upon request.

Since it is most likely that the benchmark partner will want to send supporting information after the interview, some benchmark teams have included a self-addressed, prepaid express mail form with the questionnaire that is sent to the partner. This ensures a rapid turnaround of any promised support data.

Finally, some benchmark experts report that a telephone interview is often more candid than an on-site interview because the telephone provides a measure of detachment for the individuals involved.

This concludes step 4 on how to conduct and debrief a benchmark site interview. Throughout this process, benchmark teams should keep the main objective in focus which is to gather data and information that will ultimately result in an action plan to dramatically improve or radically reengineer the business processes under study.

The successful accomplishment of this purpose will directly correlate with the quality of the data and information that is gathered, organized, collated, and analyzed.

Notes for Step 4: Conduct a Thorough Benchmark

The following are the tasks in Step 4. Use this page to enter notes on each task, track your progress on these tasks and identify when they have been satisfactorily completed.

4.1	**Guidelines**
4.1.1	*General Interview Requirements*
4.1.2	*Specific Interview Requirements*
4.1.3	*Basis for Information Sharing*
4.1.4	*Follow the Agenda*
4.1.5	*Meeting Conventions*
4.1.6	*Note Taking*
4.1.7	*Monitoring*
4.1.8	*Concluding the Interview*
4.2	**Perform a Post-Interview Debriefing**
4.3	**Telephone Interviews**

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STEP 5. ANALYZE THE BENCHMARK RESULTS AND PLAN TO CREATE A BEST-IN-CLASS PROCESS

Quantify the differences in practices and metrics between your organization and your partners' organizations. Then determine which of your partners' practices will help you reach your goals of improving your benchmarking process. Finally, determine how best to achieve the desired improvement in your benchmarking process and create a plan that can be used to implement it.

At this point, at least half of the benchmark visits and interviews have been completed, benchmark teams have been debriefed, and the data gathered by the teams has been collated.

The next and final task is to prepare the benchmarking report. The final benchmarking report consists of two sections—the confidential detailed report for internal use only, and a summary report that can be shared with all benchmark partners. The summary version will differ from the internal version essentially in that companies and individuals will not be identified, and your conclusions, recommendations, and action plan will not be included.

The usefulness and applicability of the benchmark report will be based primarily on how well the benchmark teams collect and organize the data and information they gathered during the site visits.

The ultimate value of the benchmarking report will depend upon the quality of data analysis, the insight demonstrated by the conclusions reached from the analysis, and the courage expressed in the recommendations for change and improvement.

This step is designed to help benchmark teams write an effective benchmarking report. Each task presents several ideas and recommendations that should be discussed in team meetings as the report is being written. Since this material can only be a

guide, teams are encouraged to adapt or tailor the material as they see fit.

5.1 Why Produce a Benchmarking Report

The object of benchmarking is not to produce a report that gets passed around, filed and forgotten. The benchmarking report should be an instrument that supports organizational change and process improvement. Therefore, everything put in the benchmarking report should serve a defined purpose. A well-written benchmarking report will accomplish several objectives.

The benchmarking report must:

- Facilitate meaningful and perhaps dramatic changes in process performance justified by the data that was collected and analyzed

- Capture and document best practices, process measures and methods of measuring process activities, and potential process performance targets

- Document the benchmarking process both as a historical record and to serve as a model for future benchmarking projects

- Fulfill the obligation to provide benchmark partners with a summary of benchmark findings which was a condition for participation

- Provide continuity for further work with benchmark partners

- Serve as a training and communications vehicle within your own organization and an aid to discussing process issues with external parties.

5.2 Benchmarking Report Structure

The benchmarking report should be written in three sections as follows:

- *Executive Summary.* This is a two page high-level condensation of the purpose, conduct, and results of the benchmark study.

- *General Report.* This section of the report presents factual data about the processes under study, benchmarking methodology, partners, and process comparisons. The general report is suitable for external distribution to benchmark partners and others.

- *Detailed Report.* This section of the report contains an analysis of the data collected, the conclusions reached based on this analysis, and an action plan for using these results. The detailed report is for internal use only and in some cases may be even be labeled *company confidential.*

5.3 Report Table of Contents

An effective benchmarking report will contain the following headings each of which is more fully described in task 5.5:

- Executive Summary
  - two page synopsis of the report

- Statement of Purpose
  - why the benchmark study was performed and intended results

- Process Overviews
  - background on the processes under study as a basis for understanding the data in the report

- Areas of Investigation
  - what was studied during the benchmark and the questions asked

- Benchmark methodology
  - how the study was conducted, sources for partners and data, and who participated in the study

- Partner Profiles
  - data about each partner, their processes, and best practices

- Results & Comparative Data
  - basic findings resulting from the study and comparison matrices

- Data Analysis
  - team interpretation of the meaning of the data collected and other findings

- Conclusions
  - major ideas resulting from the study and potential uses of the findings and analysis

- Recommendations
  - a slate of potential projects, actions, and activities that can be justified based on study results

- Action Plan
  - specific task assignments with costs and schedules

5.4 Report Writing Considerations

A benchmark study is an expensive and time consuming project. Such a study can only be justified if the results can be used to make dramatic improvements in organizational and process performance. This will depend, in part, on how well the report writers adhere to these principles:

- The report must be candid, forthright, and complete. Material that is unflattering to your organization or its personnel, but relevant to the purposes of process improvement must be included. Such data can be recorded in the internal or confidential section of the report. Improvement actions can be facilitated

when errors and shortcomings are recognized and acknowledged.

- The report should only contain material that can be supported by facts, data, observations, and analysis. In general, the only place in the report that should contain speculative material is in the conclusions section. And even in this case, there should be a supportable basis or justification expressed for the conclusions reached.

- Everything in the report should relate in some way to facilitating process improvement, identifying critical success factors, and establishing performance measures and targets. Extraneous material should be omitted altogether.

- The report should be concise. If necessary, supporting data can be placed in appendices or referenced as backup material. A usable report will extend from 25 to 50 pages depending on the number of processes and benchmark partners.

- The report should be well-written and very readable. It should be directed toward the specific needs of the intended audience æ usually process owners and the executive or steering committee overseeing the process improvement effort.

Considerations

Most benchmark partners participate in benchmark studies with the understanding that they will receive a summary report of the findings. This summary report should be useful from the perspective of the partners, but at the same time protect your organization's confidential data. This objective can be accomplished if only factual data and observations are included in the summary report. Analysis, interpretations, subjective material, conclusions and recommendations should be confined to the internal or detailed report.

Benchmark partners often provide sensitive material to benchmark teams with the understanding that such material will not be attributed to either the company or the individuals in that company. For this reason, the summary report made available to partners and other external entities must not include references to companies, locations, or individuals. The report writing team should also review the material in the summary report to ensure that there are no strong inferences to specific companies that would make it easy to determine the identity of the benchmark partner.

If the report writing team has substantial doubts about the material intended to be included in the summary report, it may be necessary to ask the benchmark partner to review the material concerning their organization before publication. Be advised, however, that this may result in much useful material being censored out of the report.

A final precaution is to have your own counsel review the summary report prior to publication to ensure that there are no undue legal risks as a consequence of the material to be included in the report.

5.5 The Benchmarking Report

The report writing team may, of course, structure the benchmarking report as they see fit. The suggested headings described below have been found to result in a productive report providing that the principles listed in task 5.4 are followed.

5.5.1 Executive Summary

This is a two page synopsis of the benchmark study and an overview of the general conclusions and recommendations resulting from the study. It should include the reasons the study was conducted, why the partners were selected, general observations, a summary of the major conclusions, and a short list of key recommendations.

To conserve space in the executive summary, instead of listing and describing conclusions and recommendations, reference may be made to these sections of the report.

It is not necessary to defend or justify the conclusions and recommendations in the executive summary because that is one of the key purposes of the report in its entirety.

5.5.2 Statement of Purpose

This section should reflect the motivation that led to conducting the benchmark study and the context for the study. It is also helpful for readers, not intimate with the work being done to improve your own processes, to include a short background statement to frame the benchmark study and put it in perspective.

All benchmark studies seek to discover best practices, critical success factors, performance measures, and innovative applications of technology. After acknowledging these objectives, the report writing team should note any additional or special reasons for conducting the study.

Finally, the statement of purpose should describe how the results of the benchmark study will be used, and whether there is an intention to continue working with any or all of the benchmark partners.

5.5.3 Process Overviews

The report should include a description of each of the processes being studied. This data can be extracted from the process, activity, and data models and narratives. The report writing team should only include enough descriptive data about the processes so that the material included within the report can be understood in context.

The value of the benchmarking report is enhanced to the extent that baseline performance measures and known process deficiencies are included in the report. Process deficiencies should only be described in general, again, as context for understanding the remainder of the report.

5.5.4 Areas of Investigation

This is a key section of the benchmarking report because it presents the categories of information, the performance areas, and process features that were investigated. This section should first list the five or six key areas or subjects that were benchmarked, and then the specific questions asked during the benchmark. It is helpful to the reader if the questions are arranged by subject area even if the questions were asked in some other sequence.

This section of the report may also list some of the problem areas in your processes that were targeted for investigation during the benchmark. Problems should only be described in general terms in this section.

5.5.5 Benchmark Methodology

This section of the report is optional but most authorities recommend that it be included so that readers will understand how the benchmark was performed. This is also helpful as a training aid for future benchmark studies.

The following areas can be briefly described in this section:

- Benchmark team members and assignments

- Benchmark procedures followed by the teams

- Benchmark calendar or schedule

- Sources used for research and background data including data bases, print materials, organizations, and individuals

- Partner selection criteria and method of contacting and screening used to make final partner decisions

- Lessons learned and recommendations for future benchmark studies.

5.5.6 Partner Profiles

This section should first list the organizations which participated in the benchmark study and where they are located. It is also useful to note the benchmark technique used with each partner—on-

site interview, telephone interview, or local interview.

Next, the report writing team provides a narrative describing the situation of each partner with respect to the processes benchmarked. Please note that nothing in the profile narrative should disclose which of the benchmark partners is being described. Neutral terms like *Partner A* (or other codes) can be used in the profile narrative. Obviously, the order of the profile descriptions should not reflect the order the partners and their locations were listed above.

The profile should include all useful data that can be used as an aid to process improvement. Categories of data that can be described include, but are not limited, to the following:

- General description of the partner's organizational structure and mission

- Process characteristics including stakeholder interests, customer requirements, and products and services delivered

- Critical success factors and other figures of merit

- Process measures and performance data

- Organizational structures and how they support process performance

- Technology used to support processes and key innovations

- Lessons learned, problems overcome, and opportunities exploited

The following profile was extracted from a benchmarking report and is included as an illustration of how to write a profile. The process being benchmarked was the *Process Improvement* process. Be aware that at the time of the benchmark study, this partner had not identified specific performance measures or targets.

Partner B

This organization formed a Process Reengineering Group (PRG) four years ago in response to the growing complexity of its business systems. Two years ago, the PRG was made a formal part of the organization. The PRG was formalized to address the problem of having no clear methodology for process improvement and to gain control over a situation that had *five separate consulting firms* involved in trying to help the company improve its business processes.

As an old-line company that once dominated its business sector, there was considerable internal arrogance and resistance to change. Global competition took an increasing share of their market until the point was reached where drastic action was unavoidable. The issue of survival of the company was real and provided motivation to achieve early and significant successes. Resistance to change was effectively shattered following a major downsizing of the company with several thousand jobs lost. Functional managers became involved in the program and now drive it with the aid of an effective improvement methodology. Most employees in the company now have a clear sense of what is going on and their role in strengthening the company's competitive situation. The manager characterized their present status as having some things starting to go their way. He is focused more on reengineering processes than streamlining them because the processes are "so broken."

The company has accepted the Michael Hammer reengineering philosophy concept, but tempered it with the teachings of Deming, Taguchi, and others. The Malcolm Baldrige and ISO 9000 assessment criteria are used to guide improvement efforts, but not drive them. The emphasis is on understanding the current condition for a given business process, then focusing on how to improve the value of the output products and services of that process to a defined customer population.

While the company uses some computerized modeling, the emphasis is on employing user-friendly wallcharts and storyboards with functional people to work through the improvement process. Their experience has shown that their functional people do not respond as well to the use of technology-based tools as they do to simple, highly visible devices like post-it notes and storyboards.

The manager of the PRG does not characterize the president of the company as an impassioned leader for radical change. The president believes that reengineering must be done, but expects line managers to supply the passion to get results. The company has established goals to be achieved by 1998 with respect to the program:

- Business sectors will have a strong customer focus

- The company will develop a strategic advantage over its competitors

- Processes will be capable of results within a strategic framework and an operational framework defined by a company-wide process map (process flow diagram wallchart), which includes the company's ten key business processes

- Suppliers will participate in, and contribute to, process redesign as defined in key results areas and specific supplier actions

- The company will develop an active learning culture

- Information systems development will be authorized only for improved or reengineered processes.

Up until this year, the efforts of the PRG have been supported by budgeted funding. Now that the concept of reengineering has been somewhat institutionalized, the PRG will shift to a fee-for-service arrangement with its internal customers. The functional elements are responsible for improvement projects with the support of the PRG as appropriate. Functional people do 90% of the work, and the person running the project is the process owner.

Projects are initiated based on a perceived need by a process owner. The PRG helps process owners recognize potential needs by providing awareness training and keeping watch for programs or processes that may be in trouble. The need for an improvement project is also indicated whenever a strategic decision has potential impacts on an operational area of the business. To gain credibility as an internal consulting organization, the PRG was shifted from the information management area to the mainline business area to establish a peer-to-peer relationship with business unit leaders.

PRG follows a written methodology, which was developed in partnership with a major technology company. PRG's version of this methodology differs

from the one the technology company markets. PRG's version is tied more to company strategy and business planning and has a much stronger emphasis on the change management aspects of process reengineering, which PRG feels are critical to success. PRG feels that the commercial version of the methodology is more appropriate for use at the division level of an organization rather than as a company-wide methodology.

PRG uses the "Case-for-Action" concept in the methodology to justify improvement projects. The Case-for-Action concept focuses on the contribution of improvement projects to business unit objectives (macro-level measurements) rather than the specific return on investment in an improvement project (micro-level measurements). The concept behind the Case-for-Action is that *improvement program costs are trivial compared to potential benefits of a successful improvement effort, and the cost to calculate the potential return on investment in any meaningful way could easily exceed the cost of the improvement project itself.* It is important to note that the costs of improvement projects under this concept do not include major capital investments such as machines, facilities, or information systems required to implement the improved process. Such requirements are handled through the normal capital investment budget process and are based on business requirements.

The techniques and tools most used in PRG include:

- Benchmarking
- Activity and data modeling
- Process flow diagrams
- Brainstorming and storyboarding
- Seven standard quality tools for data capture and analysis
- Activity-based costing (but not formal or extensive)
- Economic analysis for significant investment requirements.

An important element of the company's concept of process improvement is the establishment of "decision rights" associated with the change management factors of process management. Six categories of decision rights are established and assigned to work teams as appropriate. As decision rights are assigned to improved processes, the organization is restructured so that it can support these decision rights. Restructuring takes into account management practices, rules and regulations, recognition and reward systems, and other cultural and organizational factors.

The driving force for process improvement is the "voice of the customer." This voice is "heard" at four levels:

- Voice of the market—What is happening in a market segment that impacts a defined customer base?

- Voice of technology—What technology developments must we respond to or initiate in order to serve our customers?

- Voice of a customer segment—What interests a group of customers in a class of product offering with respect to our competition?

- Voice of an individual customer—Using sophisticated systems and data bases, how can we best serve a customer on an individual basis?

The PRG staff is composed of volunteers drawn from the functional community. About a third are business systems analysts, a third industrial engineering experts, and a third human resource professionals. Assignment to the PRG is considered to be career enhancing. Based on a variety of factors, PRG staff members may remain in the group moving from project to project, while others may move into the business unit community to help run the processes they helped improve. Some staff members are on sabbatical or temporary assignment and return to their previous assignment at the conclusion of one or more projects.

Some lessons learned in the PRG include the following:

✓ You can't do enough training and education

✓ Full-time teams should work in tandem with part-time experts

✓ The program must be accomplished in-house, avoid over reliance on outside consultants

✓ The client must own the process and must fund at least 50% of the effort, provide strong sponsorship and clear direction

✓ Document as you go along

✓ Bring IM professionals into the process only after macro process redesign, and only as business systems analysts with no technical biases

✓   Keep the IM technical staff out of the process improvement business

✓   Don't overemphasize documenting the existing process: move quickly to improvement analysis and process redesign

✓   Don't look for continuous improvement factors during process redesign: continuous improvement actions should follow implementation of the redesigned process

✓   Simplify processes to the point of rebellion: don't improve an activity or sub-process when you can eliminate it

✓   Benchmark and involve external customers and suppliers in process redesign

✓   Get process owners and sponsors excited about change management so that the redesigned process can actually be implemented correctly

5.5.7 Results and Comparative Data

This section of the benchmarking report should consist of a narrative projecting a consensus view of the experience of all benchmark partners with respect to the processes under study. It should also show comparative data presented in matrix form (if possible) of key elements or subjects that are common for two or more benchmark partners.

This is the last section in the general report which can be distributed to all benchmark partners so it should be restricted to facts and observations rather than analysis and interpretation.

The table on the following page (extracted from a benchmarking report) shows comparative data on critical success factors for process reengineering. It is reproduced here as an example of how to present comparative data.

Table 2 identifies the partners who commented on each success factor. *The absence of a checkmark indicates only that the partner did not overtly mention that success factor when discussing their improvement program.*

CSF Comparison Table	A	B	C	D	E	F	G	H	I	J	K	L
Effective executive leadership	✔		✔		✔	✔	✔		✔	✔	✔	✔
Link process improvement to strategic and business plans		✔	✔				✔		✔		✔	
Strong customer focus		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Functional elements drive improvement teams	✔	✔	✔	✔	✔		✔			✔	✔	✔
Minimum reliance on outside consultants	✔	✔					✔		✔	✔		
Reliance on metrics/measures	✔	✔	✔		✔	✔	✔	✔	✔	✔	✔	✔
Adherence to quality standards	✔	✔		✔			✔	✔		✔	✔	✔
Use tools and techniques	✔	✔					✔		✔	✔	✔	✔
Existence of a skilled reengineering support group	✔	✔			✔		✔		✔	✔	✔	
Strong emphasis on change management issues	✔	✔	✔		✔	✔	✔			✔	✔	✔
Move toward team-based workgroups		✔	✔			✔	✔	✔		✔	✔	
Information systems reengineering coordinated with process reengineering		✔				✔	✔	✔	✔			
Structured methodology to guide improvement efforts	✔	✔	✔	✔	✔		✔			✔		✔

Table 2

5.5.8 Data Analysis

This section of the report contains the analysis of all the data gathered during the benchmark study. It is necessarily subjective and will be based on the benchmark team's interpretation of what was discovered and observed with respect to each partner.

To the degree possible or practical, material presented in this section should reference the data used in the analysis so that readers can understand something about the basis for the analysis.

This is also where the benchmark team comments on the feasibility of adapting best practices and performance measures for use within your organization. What may work well in another organization may not be suitable for yours. The benchmark team should note such situations and justify their opinion. Likewise, when a best practice seems applicable to your organization, the team should support this as well.

The analysis section should also contain useful charts, graphs, matrices, or other illustrative techniques for presenting data in a useful form. Each chart, etc., should be accompanied with a narrative showing how the data displayed is relevant to the process improvement work being done in your organization.

This is also a suitable place for commenting on lessons learned, problems, barriers, and opportunities observed or commented on by any of the benchmark partners. In general, this is the section of the benchmarking report where team members can project their views and understandings about the data gathered during the study.

5.5.9 Conclusions

This is the heart of the benchmarking report. Here, all that was done during the study is consolidated into a structure that is most useful in supporting process improvement efforts.

The recommended subheadings in this section include the following and answer the indicated questions:

- *Process Vision.* What was learned during the benchmark process that will contribute to the development of an optimum process vision that maximizes support for all stakeholder interests? What was learned that will strengthen customer focus for the process?

- *Process Measures.* What measures have our partners developed that related to process performance, output product and services in the categories of:

    — Fitness for Purpose
    — Conformance to Standard
    — Process cycle and response time
    — Fixed and variable process costs?

  How have these measures been integrated into process operations so that they are a natural consequence of the process?

- *Performance Targets.* What levels of performance have our partners been able to achieve that would serve as demanding but attainable goals for our process?

- *Best Practices.* What concepts, methods, techniques, policies, procedures, and practices do our partners use that enable them to obtain superlative process performance? What approaches are being used to align process, organization, technology, and business objectives?

- *Technical Innovations.* What new technologies are being employed in the processes under study, or what innovative uses of old technologies are in evidence? What is the interrelationship between technology application and organizational structures?

- *Pitfalls and Cautions.* What have we learned that didn't work as planned in our partner's organizations, and what should we be concerned about as we try to adopt some of our partner's methods

given the differences in our organization and those of our benchmark partners.

5.5.10 Next Steps

This section may conclude with a statement of the next steps that will be taken as a result of performing this benchmark study. Follow up studies, further data analysis, additional research, or invitations to selected benchmark partners to visit your organization are all potential next steps.

5.5.11 Recommendations

Out of the foregoing, the benchmark teams should document a series of recommendations for process-oriented improvement actions. Each recommendation should be based on the conclusions documented in the previous section and should make specific references to data and/or analysis that support the recommendation.

Each recommendation should be rated in terms of potential impact (functions, organizational levels, stakeholder interests, etc.), level of difficulty in implementing, priority, degree of risk, estimated costs and quantifiable benefits, estimated return on investment, and estimated implementation schedules.

Some recommendations may be hard to describe in the indicated categories, but an attempt should be made to provide meaningful management decision support data. Ultimately, all recommendations above a certain cost or risk level will need to be supported with a business case or case for action.

The number of recommendations is not as important as the quality. Some recommendations will need to be included in the process TO-BE analysis, while others may be pursued independent of formal process improvement procedures.

5.5.12 Action Plan

The final section of the benchmarking report is the action plan. The action plan may be developed when the benchmarking report is written; but more than likely, it will be developed (or completed) after the remainder of the report has been reviewed and approved by higher authority.

The action plan describes what is going to change as a consequence of performing the benchmark. It consists of a slate of specific projects or tasks that have been assigned to specific project managers or action officers; scopes of effort, schedules, milestones, performance objectives and measures, and costs or budgets.

It may be helpful to think of actions in four classes:

- *Process refinement.* Streamlining actions doable at low cost and minimum risk.

- *Emulation.* Model one benchmark partner's process with few changes or adaptations.

- *Leapfrog.* Combine information from several partners in an attempt to achieve a best-in-class situation that surpasses any one partner's process.

- **Breakthrough.** Combine information gathered in the benchmark with intensive analysis and creative thinking to achieve world-class process performance. This action level is high-cost and high-risk.

5.5.13 Appendices

As necessary, additional materials may be included in appendices.

Notes for Step 5: Analyze the Benchmark Results and Plan to Create a Best-in-Class Process

The following are the tasks in Step 5. Use this page to enter notes on each task, track your progress on these tasks and identify when they have been satisfactorily completed.

5.1	Why Produce a Benchmarking Report	
5.2	Benchmarking Report Structure	
5.3	Report Table of Contents	
5.4	Report Writing Considerations	
5.5	The Benchmarking Report	
	5.5.1	*Executive Summary*
	5.5.2	*Statement of Purpose*
	5.5.3	*Process Overviews*
	5.5.4	*Areas of Investigation*
	5.5.5	*Benchmark Methodology*
	5.5.6	*Partner Profiles*
	5.5.7	*Results and Comparative Data*
	5.5.8	*Data Analysis*
	5.5.9	*Conclusions*
	5.5.10	*Next Steps*
	5.5.11	*Recommendations*
	5.5.12	*Action Plan*
	5.5.13	*Appendices*

CONCLUSION

This concludes the tutorial on how to conduct a complete benchmarking program. Following the suggested format and structure, and adhering to the principles and suggested content, the benchmark team will be able to attract and select the right partners, conduct professional, valuable site visits, and develop an action-oriented benchmarking report that accomplishes the objective of the benchmark study and justifies the time, cost, and effort that went into the project.

The next steps involve putting your plan into action by developing TO-BE models, attaining approval for your plans and implementing your best-in-class process.

For further information on benchmarking, including the preparation of the benchmark report please refer to the sources listed in following section. All forms used in this document are shown again on plain pages (no footers or other data) in the Appendix, following the References section. You may replicate any of the forms that will be helpful to you in your benchmark program.

Notes and Ideas:

Step 1: Lay a Strong Foundation for Benchmarking Success
Step 2: Select Benchmark Partners with Best-in-Class Processes
Step 3: Plan for Productive Benchmark Sessions
Step 4: Conduct a Thorough Benchmark
Step 5: Analyze the Benchmark Results and Plan to Create a Best-in-Class Process

REFERENCES

Documents used in developing this booklet include the following:

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How to Prepare for and Conduct a Benchmark Project

APPENDIX: FORMS

Critical Success Factor Worksheet

Key Business Process:	
Proposed Critical Success Factor:	
Reason Proposed:	
CSF Process Owner:	
Analysis for CSF Qualification	

1	Is the proposed CSF quantifiable? How?
2.	Is the proposed CSF measurable? How?
3.	Is the proposed CSF auditable? How?
4.	Does the proposed CSF indicate process results over time? How?
5.	Does the proposed CSF indicate progress toward goals over time? How?
6.	How does a change in the key business process correlate with changes in the magnitude of the proposed CSF?
7.	Is this measure for a proposed CSF accepted within your organization?
8.	Is this proposed CSF measure widely accepted by other organizations? Which ones?
9.	Is it easy to obtain data? Is the data integrity reliable? Is the resulting CSF measure easily calculated?
10.	Is this proposed CSF reported in open literature? Where?

Process Performance Profile

Process Output:	
Process Customer:	

Process Performance Measures	Current Level		Trend

Quality:
    First-pass yield
    Customer returns
    Process completion/plan
    ratio			

Cost:
    Process cost
    Process value-added
    Value-to-cost ratio			

Cycle Time:
    Work-in process inventory
    Process cycle time
    Process changeover time
    Process downtime			

Process Performance Goals	Short Term	Long Term
First pass yield **Value-to-cost ratio** **Cycle time**		

Process Activity Diagram:

Benchmark Partner Profile				
Company Name:				
Site Address:				
Mailing Address:				
Source:				
Information Obtained on Company via Research:				
	Revenue Size:		**No. Employees:**	
	Process Information:			
Contact Name:			**Phone:**	
Title & Dept:			**Fax #:**	
Admin Assistant:			**Phone:**	
			Fax #:	
Contact Name:			**Phone:**	
Title & Dept:			**Fax #:**	
Admin Assistant:			**Phone:**	
			Fax #:	
Call Record	**Date:**	**Transaction:**		

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Benchmark Partner Profile

Information Sent	Date Sent	Method Used	Sent By
Qualification Information on Partner:			

Planned Meeting Date:		**Others Attending The Benchmark Meeting (Names & Titles)**
Confirmed/ Phone:		
Confirmed/ Letter:		
Questionnaire Sent:		
Thank You Letter Sent:		
Benchmark Report Sent:		

Travel Information & Logistics	
Flight Information:	
Hotel Reservations:	
Auto Reservations:	
Detailed Directions to Site:	

Benchmark Status Report   9 JUN 94

Prospect	Source	Progress	Status	Interview Date	Processes CR-IN
A-1 Bank	Research	Qualification	In-progress		CR
Business Direct	Referral	Initial Contact Made	In-progress		IN
Pro-Tech	Research	Not Started			
RUN Software	Referral	Key Contact Made	Dropped (3)		CR-IN
Semi-Soft, Inc.	Research	Key Contact Made Briefing Pkg Sent 6/1	In-progress	Probably will okay benchmark	CR-IN
True Alliance	Research	Not Started			
Young Sports	Referral	Key Contact Made	Accepted Confirmed	7/15 - OS	CR
Partner	Referral Research	Initial Contact Made Key Contact Made Qualification Briefing Pkg Sent Questionnaire Sent	In progress Dropped (1): No best practice in IT processes (2): Overbooked on benchmarks (3): Insufficient lead time (4): Not approved by us (5): Requested materials not satisfactory (6): Other Accepted Confirmed	Date/code OS-Onsite TC-Telecall	Priority CR-Customer Relations IN-Inventory Control

Benchmarking Questionnaire Sample

1. How do you define this process? Please describe it.
2. Do you consider this process to be a problem or concern in your company? If not today, was it a problem in the past?
3. What is the measure of quality for this process? What are the criteria that you use to define excellence in process performance? How do you measure the output quality of this process? How do you measure progress in quality improvement?
4. How do you consider cost and schedule in this process?
5. How much and what type of training do you provide for the various job categories of the process team?
6. What process improvements have given you the best return in performance improvements?
7. What company, excluding your own, do you believe is the best in performing this process?

	Benchmark Team Site Interview Folder	
Tab	**Contents**	**Source**
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Benchmark Mission Statement

Site Visit Goals and Objectives	Partner _____	
1		
2		
3		

Process Briefing Notes   **Process Name**_____

Process Measures		Process _____
Category	**Measure Name**	**Current Performance**
FFP		
CTS		
CT		
PC		

Process-Related Problems	Process
1	
2	
3	
4	
5	
6	
7	

Benchmark Team Assignments		Partner_____
Role	**Assigment**	**Additional Duties**
Questioner		
Recorder		
Monitor		

Draft Agenda		Partner	
From	**To**	**Agenda Item**	**Responsibility**

Benchmark Program Schedule Board	
Where Located;	
Maintained by:	
Update Frequency:	

Benchmark Preparation Checklist

Action Items	Due Date	Assigned	Done
Benchmark Company			
Key Contact			
Visit Confirmed			
Team Assignments Made			
Read Ahead Sent			
Travel Arrangements Complete			
Tape Recorder and Laptop Secured for Trip			
Meeting Agenda Prepared			
Confirming Telecall			
Confirming FAX			
Site Map and Directions Received			
Site Interview Folder Complete			
Mission, Goals and Objectives Reviewed			
Benchmark Contact Names Memorized			
Site Interview Folder Materials Reviewed			
Preparations Complete			

Process-Related Questions and Answers	Process_____
Performance Goals	
Performance over Time/Distance	
How Measured	
Performance Enablers	
Performance Barriers	

Partner Process-Related Questions and Answers	Process_____ Partner _____
Performance Goals	
Performance over Time/Distance	
How Measured	
Performance Enablers	
Performance Barriers	

Benchmark Interview Closing Actions	
Closing Actions	**Check**
Suggest that it is time to bring the meeting to a close	
Thank the partner for cooperating in the benchmark	
Summarize the key benefits achieved during the interview	
Verify all commitments to send additional documents	
Offer to host a benchmark at your organization on a future date	
Relate the next step which is to prepare the benchmark report	
Assure the partner that a copy of the external version will be sent	
Provide a contact name and telephone number	

Partner Debriefing Chart	Process _____ Partner _____
Performance Goals and Targets	
Critical Success Factors	
Process Performance over Time/Distance	
How Performance is Measured: Cycle Time, Quality, Service, Cost	
Performance Enablers: Organization	
Performance Enablers: Technology	
Performance Barriers and Lessons Learned	